



FCC CFR47 PART 15 SUBPART C

C2PC CERTIFICATION TEST REPORT

FOR

GSM/WCDMA/LTE PHONE + BLUETOOTH, DTS b/g/n

MODEL NUMBER: LG-H345, LGH345, H345

FCC ID: ZNFH345

REPORT NUMBER: 15I20243-E4

ISSUE DATE: MARCH 24, 2015

Prepared for

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Date	Revisions	Revised By
--	03/24/15	Initial Issue	D. Corona

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC
EUT DESCRIPTION: GSM/WCDMA/LTE PHONE + BLUETOOTH, DTS b/g/n
MODEL: LG-H345, LGH345, H345
SERIAL NUMBER: 501KPLC818448 (conducted) 501KPED818500 (radiated)
DATE TESTED: MARCH 9-10, 2015

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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Tested By:



STEVEN TRAN
CONSUMER TECHNOLOGY DIVISION
WISE LAB ENGINEER
UL VERIFICATION SERVICES INC

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009, FCC CFR 47 Part 2, and FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
<input checked="" type="checkbox"/> Chamber A(IC: 2324B-1)	<input type="checkbox"/> Chamber D(IC: 2324B-4)
<input type="checkbox"/> Chamber B(IC: 2324B-2)	<input type="checkbox"/> Chamber E(IC: 2324B-5)
<input checked="" type="checkbox"/> Chamber C(IC: 2324B-3)	<input type="checkbox"/> Chamber F(IC: 2324B-6)
	<input checked="" type="checkbox"/> Chamber G(IC: 2324B-7)
	<input type="checkbox"/> Chamber H(IC: 2324B-8)

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2000650.htm>

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable} \\ &\text{Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 18000 MHz	4.94 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE PHONE + BLUETOOTH, DTS b/g/n

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:
See original report for details.

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 0.46dBi.

5.4. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

The fundamental of the EUT was investigated in three orthogonal orientations X, Y, Z it was determined that X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.

Based on the baseline scan, the worst-case data rates were:

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11n HT20mode: MCS0

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	MCS-02WR	RA4Y1031433	N/A
Earphone	LG	N/A	N/A	N/A

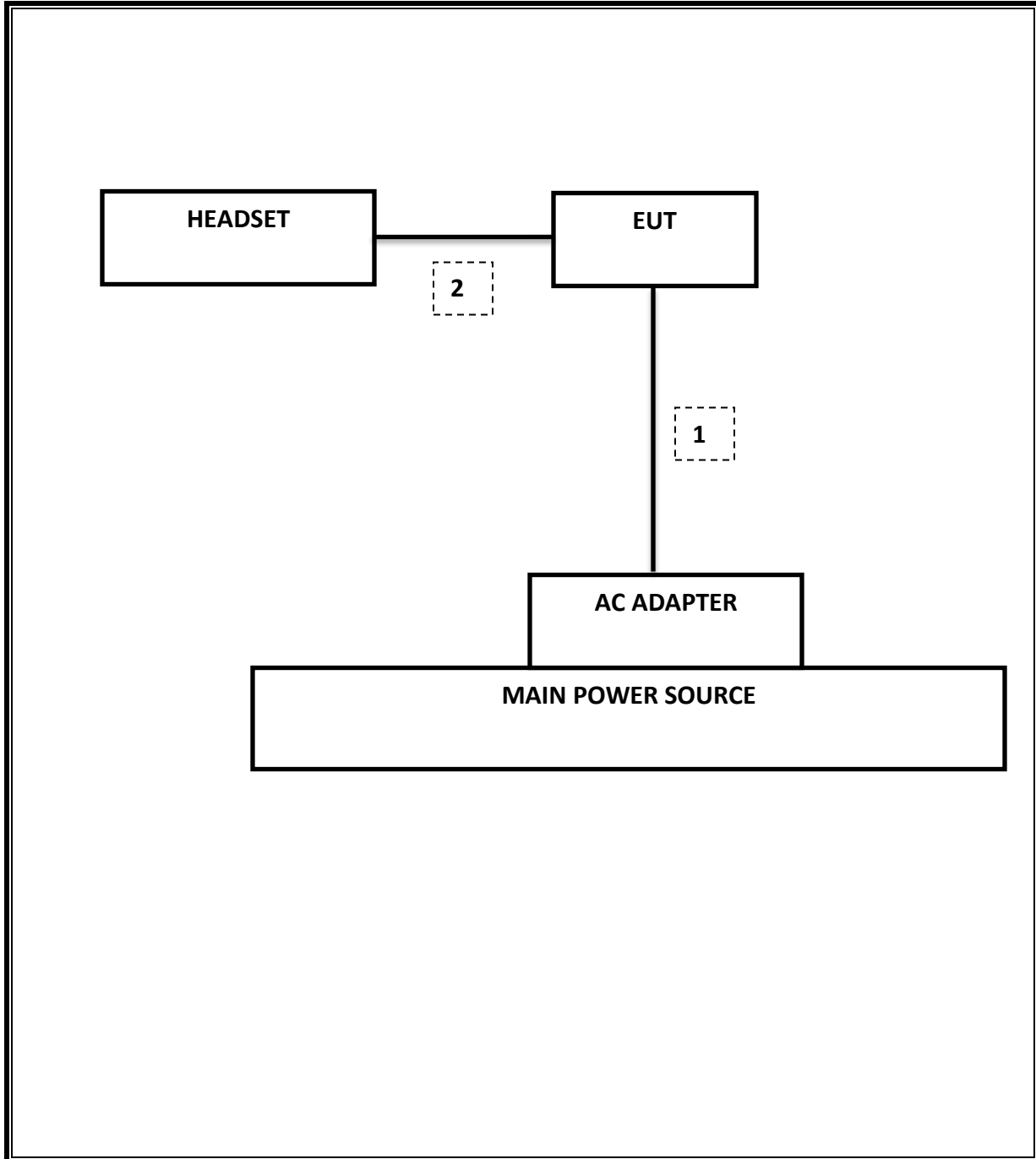
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	Mini-USB	Shielded	1.2m	N/A
2	Audio	1	Mini-Jack	Unshielded	1m	N/A

TEST SETUP

The EUT is a stand-alone unit during the tests. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List				
Description	Manufacturer	Model	Asset	Cal Due
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/15
Spectrum Analyzer,9KHz-40GHz	HP	8564E	C00986	04/01/15
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	1000741	08/13/15
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/18/15
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/15
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/15
Antenna, Horn, 1-18 GHz	EMCO	3115	60	10/25/15
Antenna, Horn,18- 26 GHz	ARA	MWH-1826/B	C00946	11/12/15
Antenna, Horn, 26-40 GHz	ARA	MWH-2640	C00891	06/28/15
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	122	02/13/16
RF Preamplifier, 100KHz -> 1300MHz	HP	TBD	C00825	06/01/15
RF Preamplifier, 1GHz - 18GHz	Miteq	AFS42-00101800-25-S-42	740	01/26/16
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	F00351	06/27/15
AC Power Supply, 2,500VA 45-500Hz	Elgar-Ametek	CW2501M	F00013	CNR
RF Preamplifier, 1GHz - 40GHz	Miteq	NSP4000-SP2	C00990	08/20/15
Attenuator / Switch driver	HP	11713A	F00204	CNR
Low Pass Filter 3GHz	Micro-Tronics	LPS17541	F00219	05/23/15
High Pass Filter 5GHz	Micro-Tronics	HPS17542	F00222	05/22/15
High Pass Filter 6GHz	Micro-Tronics	HPM17543	F00224	05/22/15

Test Software List			
Description	Manufacturer	Model	Version
Radiated Software	UL	UL EMC	Version 9.5, 07/22/14
Conducted Software	UL	UL EMC	Version 9.5, 05/17/14
CLT Software	UL	UL RF	Version 1.0, 02/02/15
Antenna Port Software	UL	UL RF	Version 2.1.1.1, 1/20/15

7. MEASUREMENT METHODS

KDB 558074 D01 DTS Meas Guidance v03r02: Measurement Procedure AVGPM-G is used for power and AVGPSD-3 is used for power spectral density.

Unwanted emissions within Restricted Bands are measured using traditional radiated procedures.

Band edge emissions within Restricted Bands are measured using RMS with duty cycle factor offset method.

8. SUMMARY TABLE

C2PC reason: Please see LG FCC Class II Change Description letter for details.

FCC Part Section	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.247 (a)(2)	RSS-210 A8.2(a)	Occupied Band width (6dB)	>500KHz	Conducted	Pass	See Original
2.1051, 15.247 (d)	RSS-210 A8.5	Band Edge / Conducted Spurious Emission	-20dBc		Pass	See Original
15.247	RSS-210 A8.4	TX conducted output power	<30dBm		Pass	See Original
15.247	RSS-210 A8.2	PSD	<8dBm		Pass	See Original
15.207 (a)	RSS-GEN 7.2.2	AC Power Line conducted emissions	Section 10	Radiated	Pass	See Original
15.205, 15.209	RSS-210 Clause 2.6, RSS-210 Clause 6	Radiated Spurious Emission	< 54dBuV/m		Pass	44.68 dBuV/m

9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements. Duty cycle factor = $10\log(1/x)$ For this sample B mode = 0.5dB (duty cycle >98%); G mode = 0.47dB; N mode = 0.08dB.

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

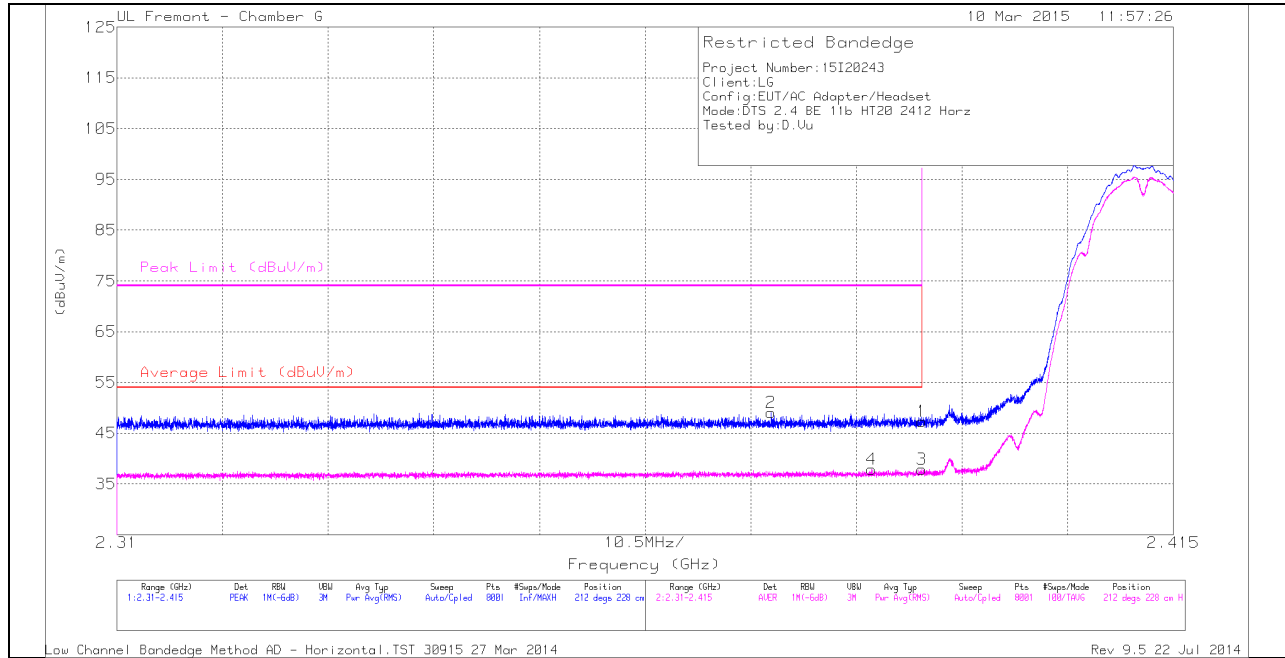
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

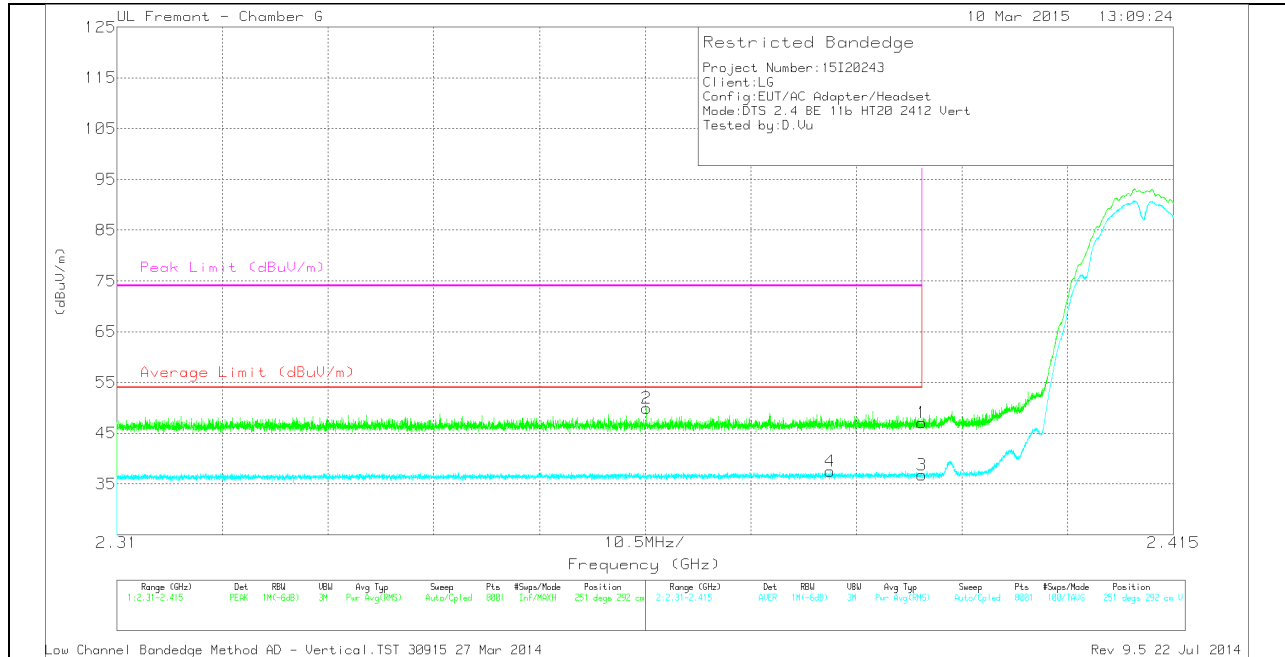
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	40.39	PK	31.8	-24.9	0	47.29	-	-	74	-26.71	212	228	H
2	* 2.375	42.18	PK	31.8	-24.9	0	49.08	-	-	74	-24.92	212	228	H
3	* 2.39	30.99	RMS	31.8	-24.9	.04	37.93	54	-16.07	-	-	212	228	H
4	* 2.385	30.9	RMS	31.8	-24.9	.04	37.84	54	-16.16	-	-	212	228	H

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

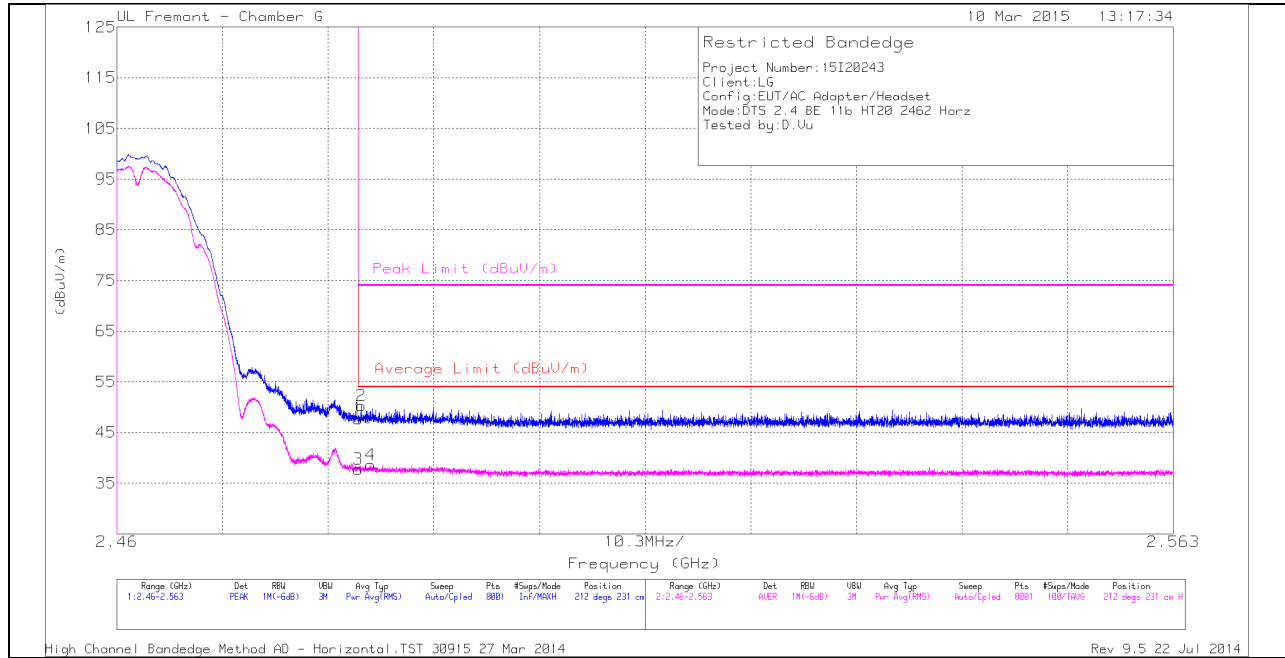
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Fitter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	40.16	PK	31.8	-24.9	0	47.06	-	-	74	-26.94	251	292	V
2	* 2.363	43.15	PK	31.7	-24.9	0	49.95	-	-	74	-24.05	251	292	V
3	* 2.39	29.87	RMS	31.8	-24.9	.04	36.81	54	-17.19	-	-	251	292	V
4	* 2.381	30.6	RMS	31.8	-24.9	.04	37.54	54	-16.46	-	-	251	292	V

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector
 RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

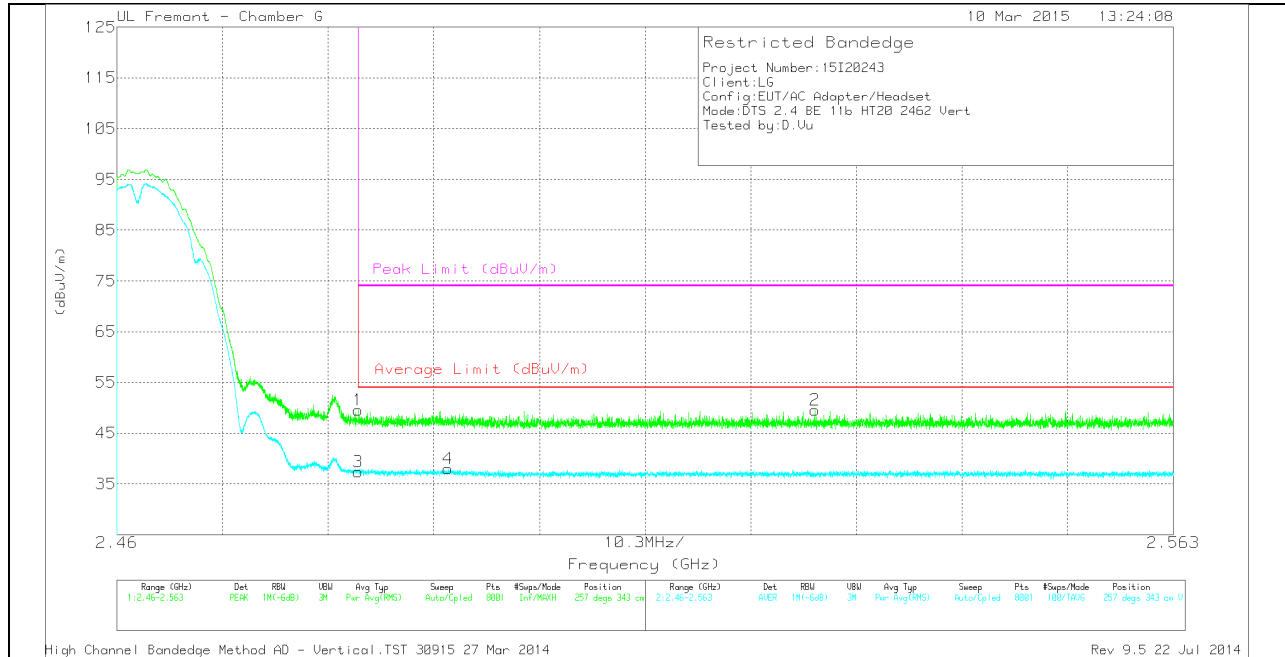
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.65	PK	32	-24.9	0	47.75	-	-	74	-26.25	212	231	H
2	* 2.484	43.17	PK	32	-24.9	0	50.27	-	-	74	-23.73	212	231	H
3	* 2.484	30.64	RMS	32	-24.9	.04	37.78	54	-16.22	-	-	212	231	H
4	* 2.485	31.5	RMS	32	-24.9	.04	38.64	54	-15.36	-	-	212	231	H

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

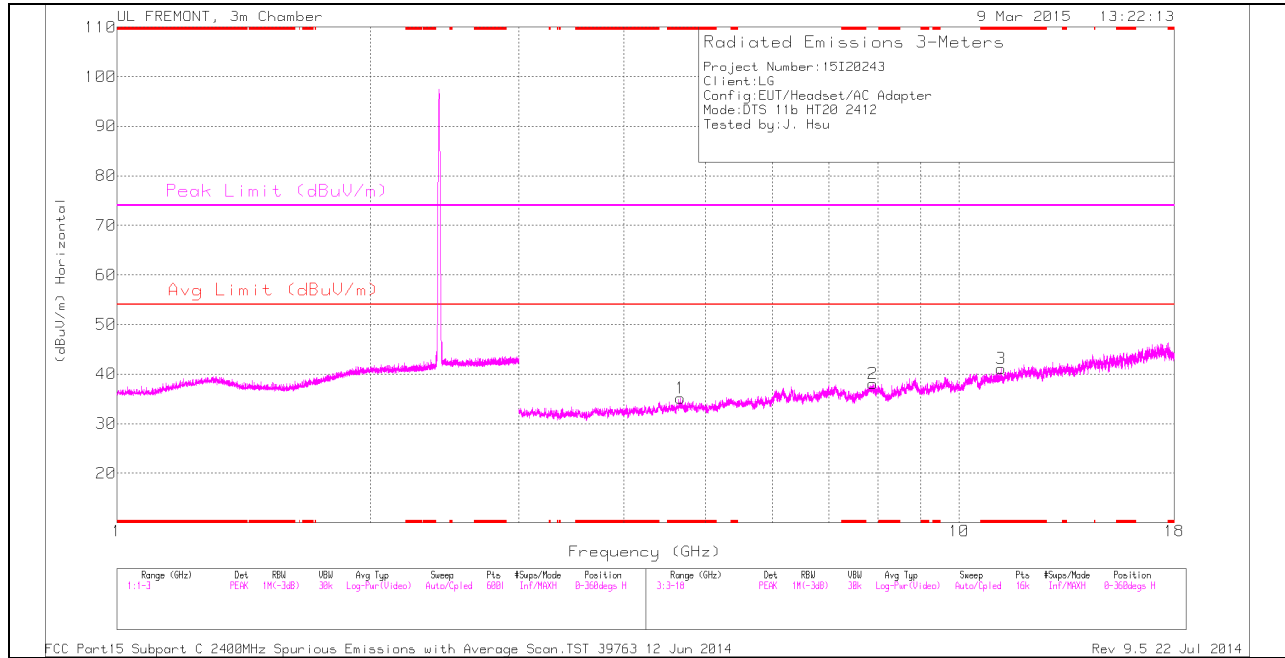
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.49	PK	32	-24.9	0	49.59	-	-	74	-24.41	257	343	V
3	* 2.484	30.24	RMS	32	-24.9	.04	37.38	54	-16.62	-	-	257	343	V
4	* 2.492	30.84	RMS	32	-24.9	.04	37.98	54	-16.02	-	-	257	343	V
2	2.528	42.48	PK	32	-24.9	0	49.58	-	-	74	-24.42	257	343	V

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector
 RMS - RMS detection

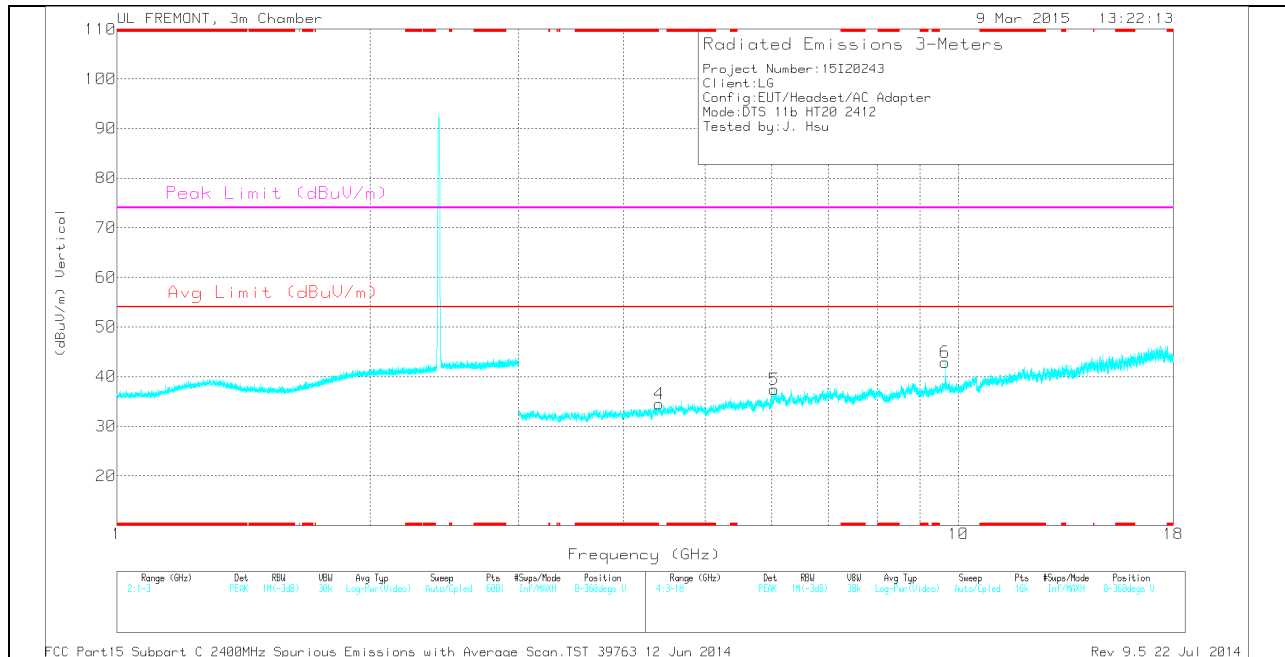
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.664	32.07	PK	34	-30.9	35.17	-	-	74	-38.83	0-360	200	H
3	* 11.207	28.23	PK	37.9	-25	41.13	-	-	74	-32.87	0-360	200	H
4	4.407	31.02	PK	33.7	-30.2	34.52	-	-	-	-	0-360	200	V
5	6.039	31.47	PK	35.2	-29.3	37.37	-	-	-	-	0-360	100	V
2	7.895	29.6	PK	35.8	-27.3	38.1	-	-	-	-	0-360	100	H
6	9.647	31.64	PK	36.8	-25.6	42.84	-	-	-	-	0-360	200	V

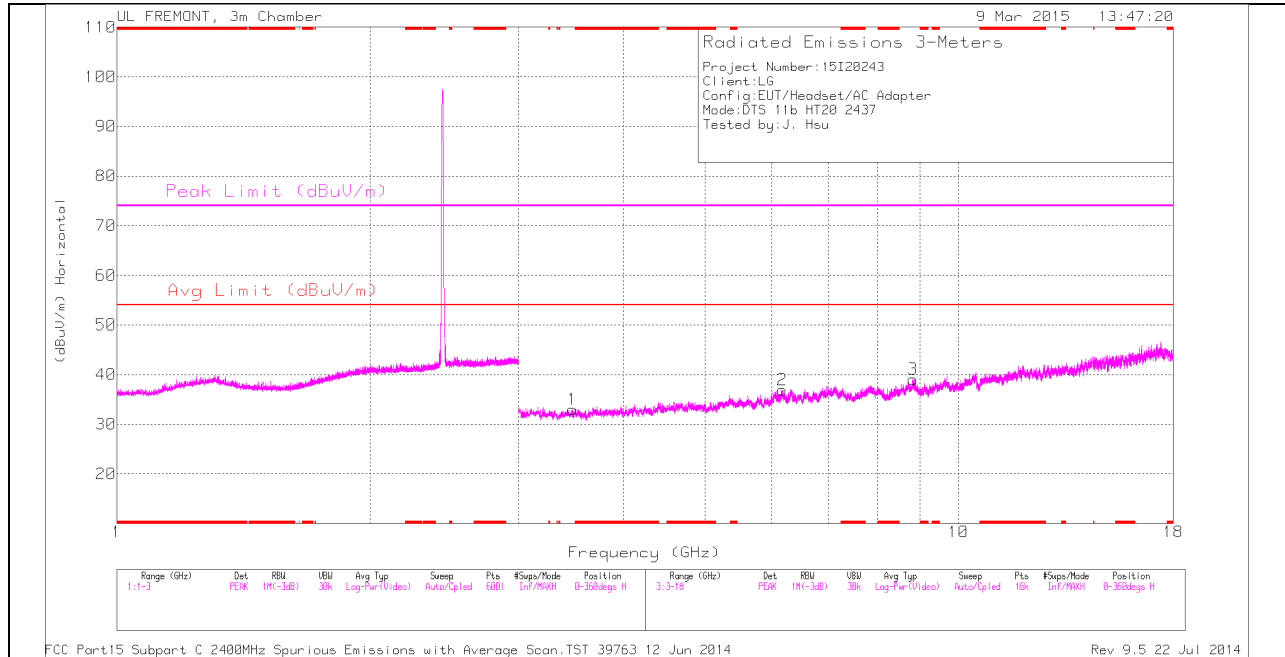
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.648	36.23	PK2	36.8	-25.6	47.43	-	-	-	-	360	100	V
9.648	25.94	MAv1	36.8	-25.6	37.14	-	-	-	-	360	100	V

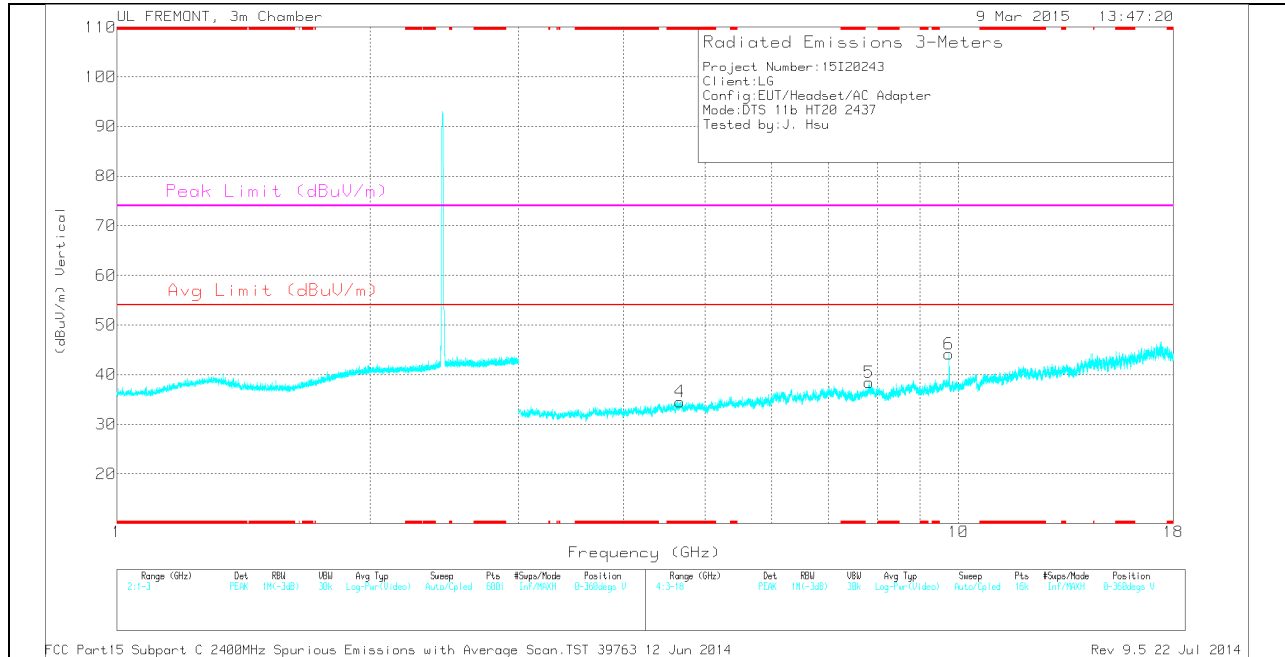
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.664	31.47	PK	34	-30.9	34.57	-	-	74	-39.43	0-360	200	V
1	3.476	31.28	PK	32.8	-31.1	32.98	-	-	-	-	0-360	200	H
2	6.176	31.75	PK	35.3	-30.1	36.95	-	-	-	-	0-360	100	H
5	7.833	30.23	PK	35.8	-27.6	38.43	-	-	-	-	0-360	100	V
3	8.833	29.69	PK	35.9	-26.5	39.09	-	-	-	-	0-360	100	H
6	9.748	32.96	PK	36.9	-25.7	44.16	-	-	-	-	0-360	200	V

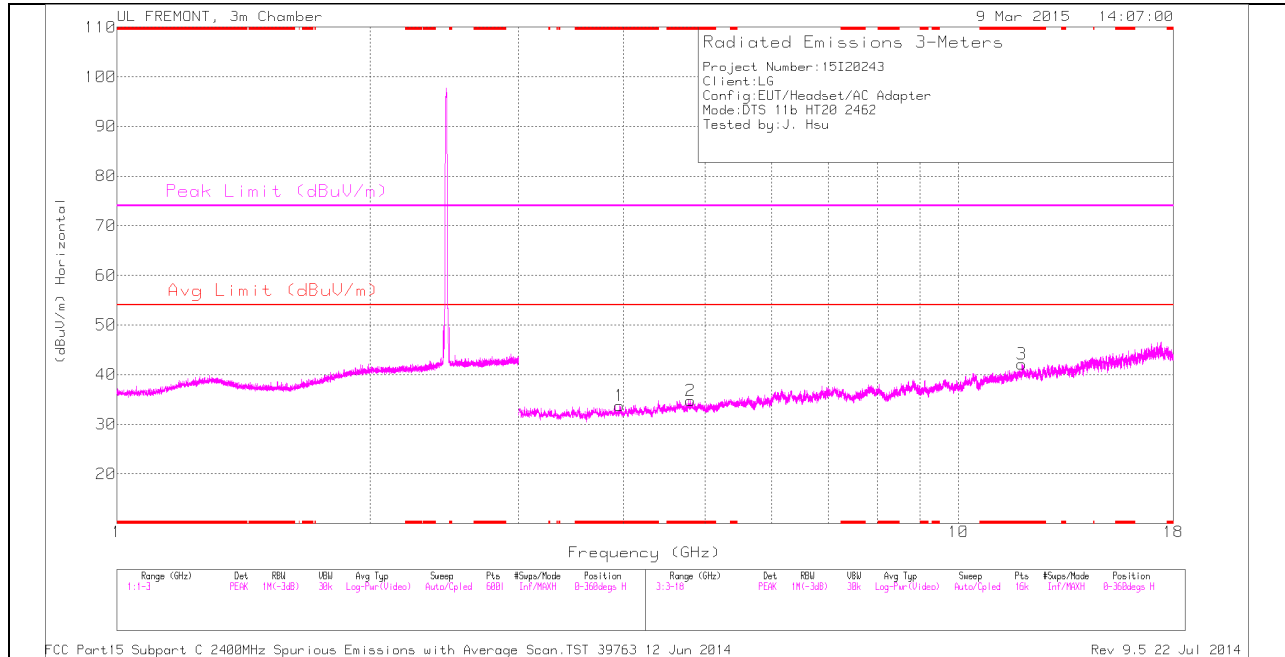
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.748	38.78	PK2	36.9	-25.7	49.98	-	-	-	-	159	288	V
9.748	31.94	MAV1	36.9	-25.7	43.14	-	-	-	-	159	288	V

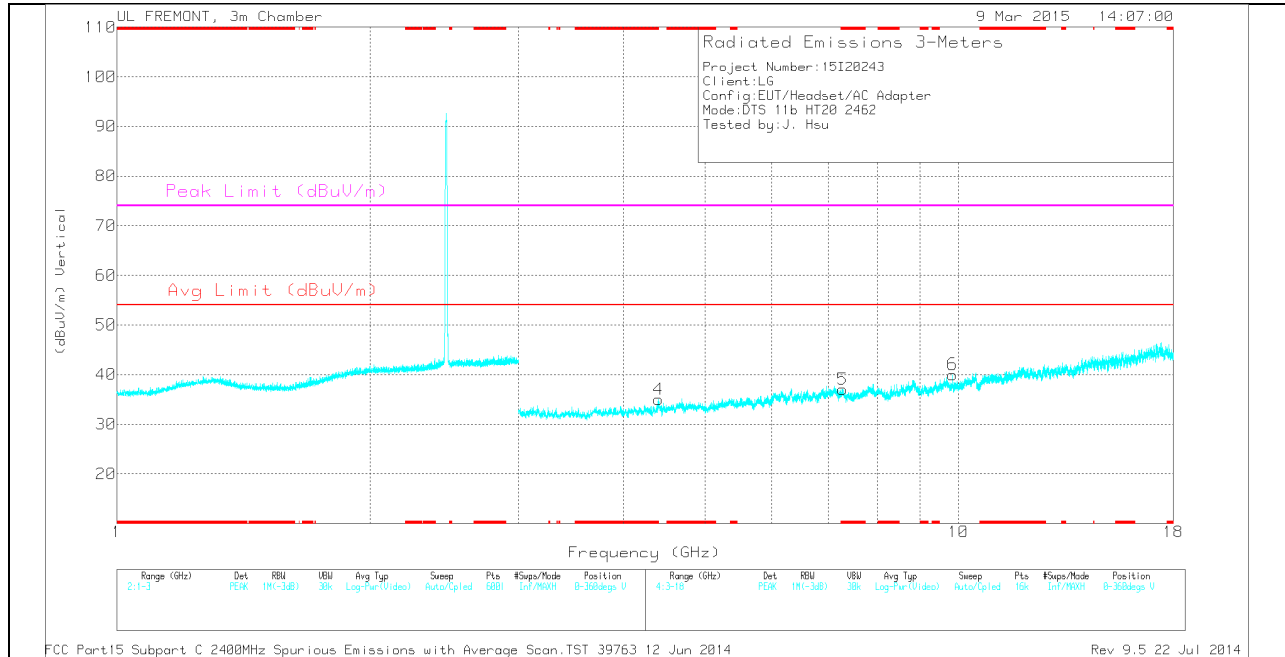
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK2 - KDB558074 Method: Maximum Peak
 MAV1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.958	31.59	PK	33.2	-31.1	33.69	-	-	74	-40.31	0-360	200	H
2	* 4.802	31.01	PK	34	-30.3	34.71	-	-	74	-39.29	0-360	200	H
3	* 11.898	29.32	PK	39.1	-26.3	42.12	-	-	74	-31.88	0-360	200	H
5	* 7.29	30.34	PK	35.6	-28.9	37.04	-	-	74	-36.96	0-360	100	V
4	4.404	31.54	PK	33.6	-30.1	35.04	-	-	-	-	0-360	200	V
6	9.847	29.03	PK	36.9	-25.9	40.03	-	-	-	-	0-360	100	V

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK - Peak detector

Radiated Emissions

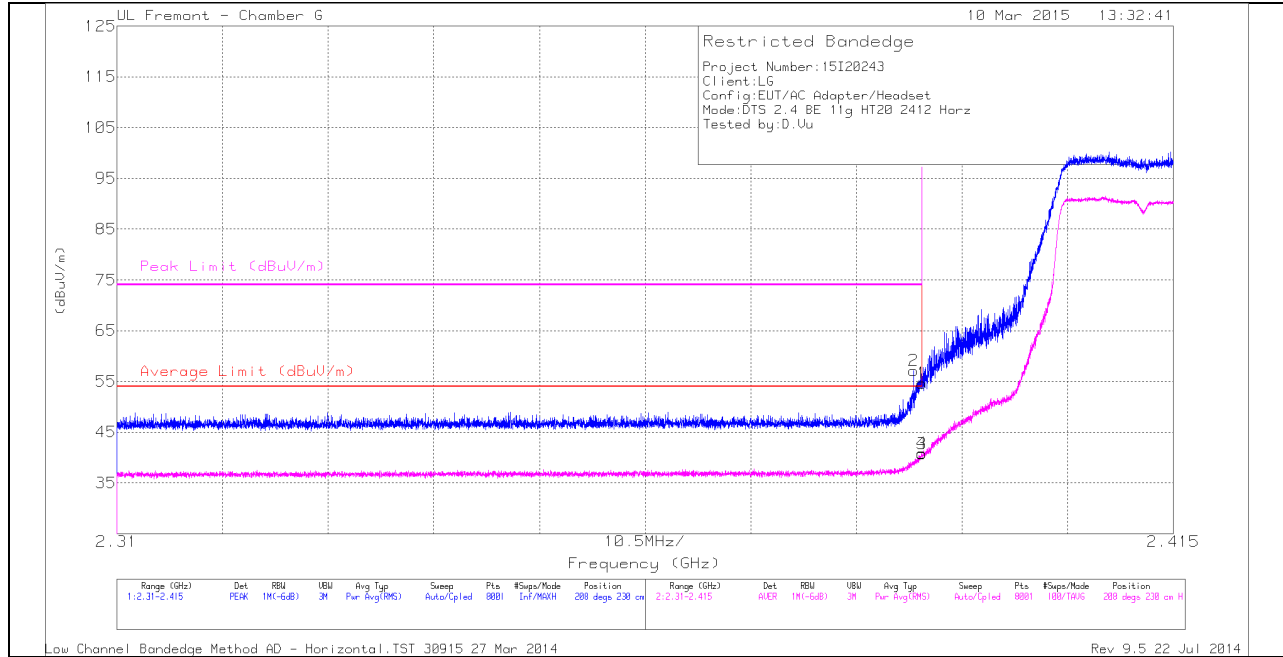
Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.9	37.84	PK2	39.1	-26.3	50.64	-	-	74	-23.36	0	100	H
* 11.899	26.33	MAV1	39.1	-26.3	39.13	54	-14.87	-	-	0	100	H

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK2 - KDB558074 Method: Maximum Peak
 MAV1 - KDB558074 Option 1 Maximum RMS Average

9.2.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT

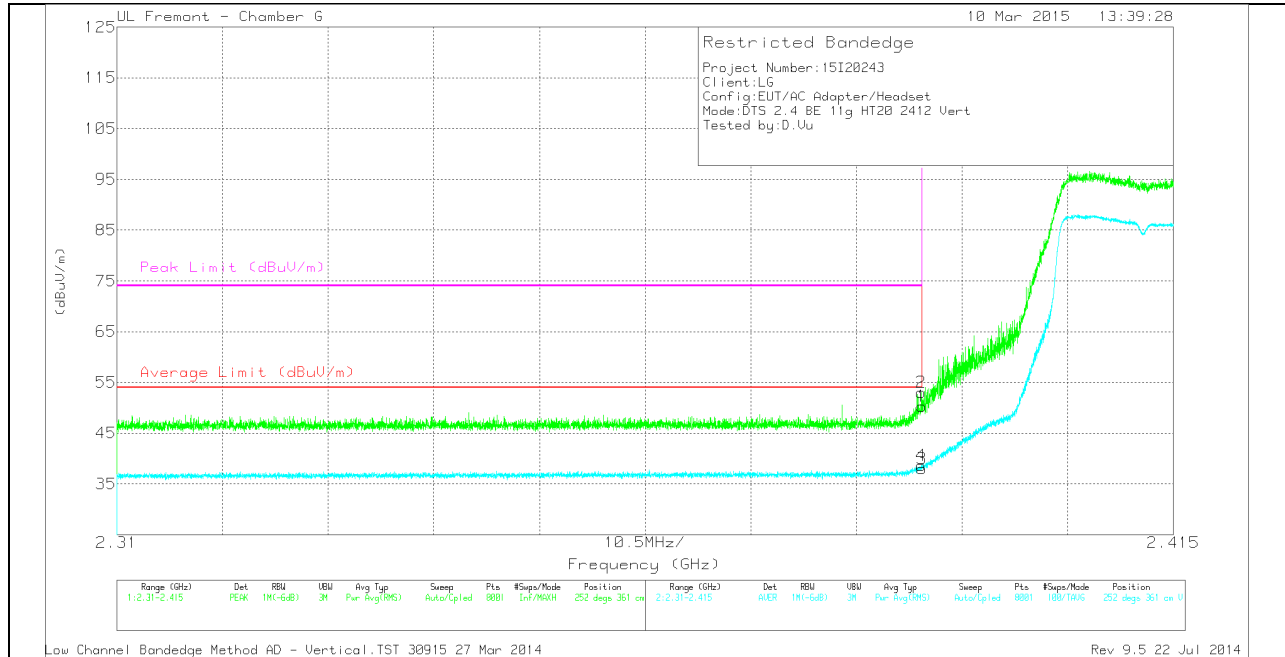


HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Filter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	47.72	PK	31.8	-24.9	0	54.62	-	-	74	-19.38	208	230	H
2	* 2.389	50.18	PK	31.8	-24.9	0	57.08	-	-	74	-16.92	208	230	H
3	* 2.39	33.62	RMS	31.8	-24.9	.18	40.7	54	-13.3	-	-	208	230	H
4	* 2.39	33.8	RMS	31.8	-24.9	.18	40.88	54	-13.12	-	-	208	230	H

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK - Peak detector
 RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	43.35	PK	31.8	-24.9	0	50.25	-	-	74	-23.75	252	361	V
2	* 2.39	46.08	PK	31.8	-24.9	0	52.98	-	-	74	-21.02	252	361	V
3	* 2.39	30.91	RMS	31.8	-24.9	.18	37.99	54	-16.01	-	-	252	361	V
4	* 2.39	31.53	RMS	31.8	-24.9	.18	38.61	54	-15.39	-	-	252	361	V

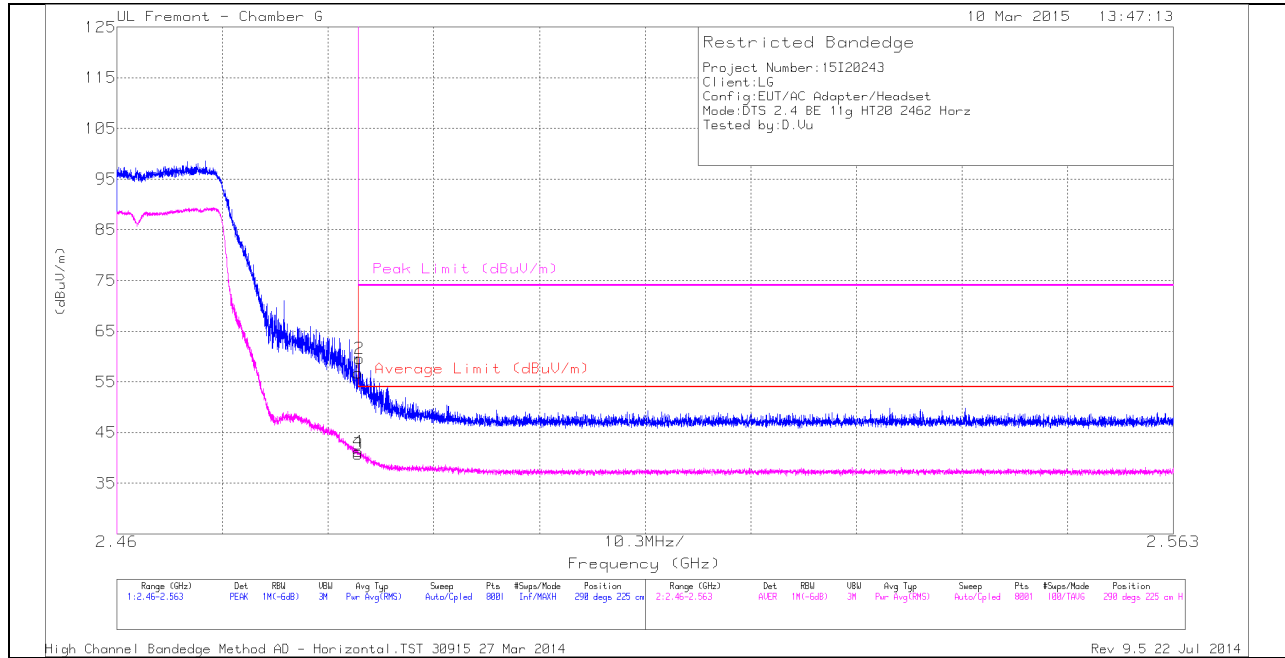
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



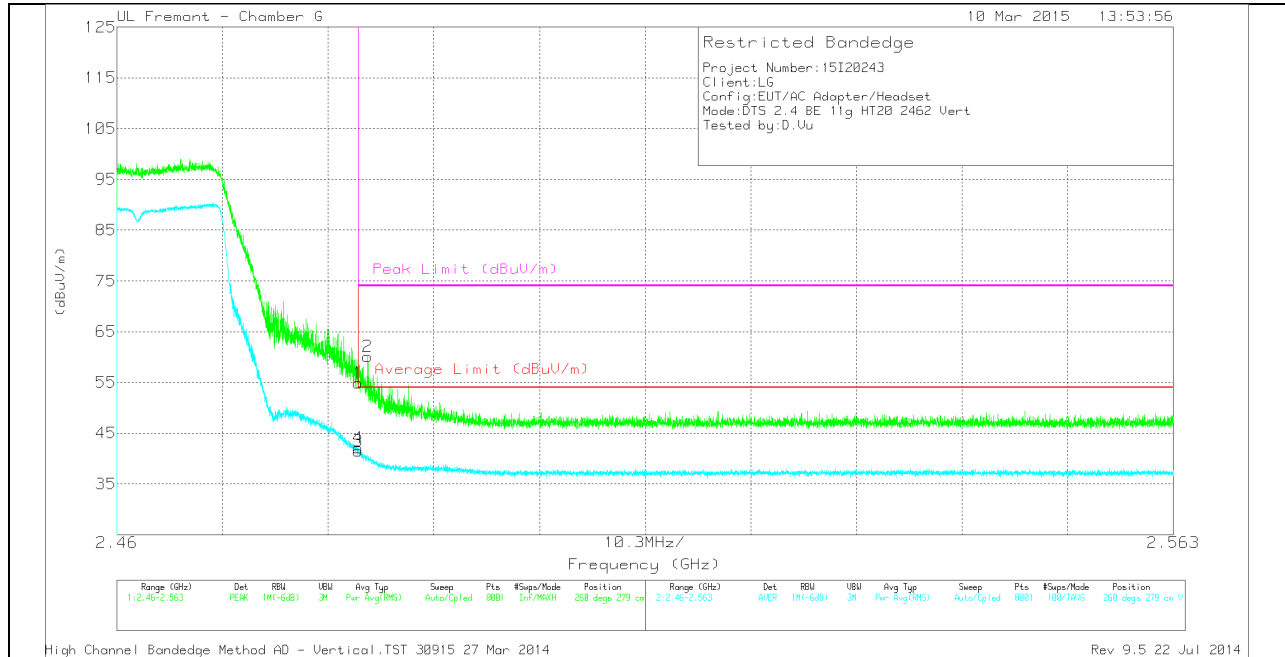
HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	49.62	PK	32	-24.9	0	56.72	-	-	74	-17.28	290	225	H
2	* 2.484	52.49	PK	32	-24.9	0	59.59	-	-	74	-14.41	290	225	H
3	* 2.484	33.46	RMS	32	-24.9	.18	40.74	54	-13.26	-	-	290	225	H
4	* 2.484	33.96	RMS	32	-24.9	.18	41.24	54	-12.76	-	-	290	225	H

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector
 RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	47.74	PK	32	-24.9	0	54.84	-	-	74	-19.16	260	279	V
2	* 2.484	53.02	PK	32	-24.9	0	60.12	-	-	74	-13.88	260	279	V
3	* 2.484	34.18	RMS	32	-24.9	.18	41.46	54	-12.54	-	-	260	279	V
4	* 2.484	34.82	RMS	32	-24.9	.18	42.1	54	-11.9	-	-	260	279	V

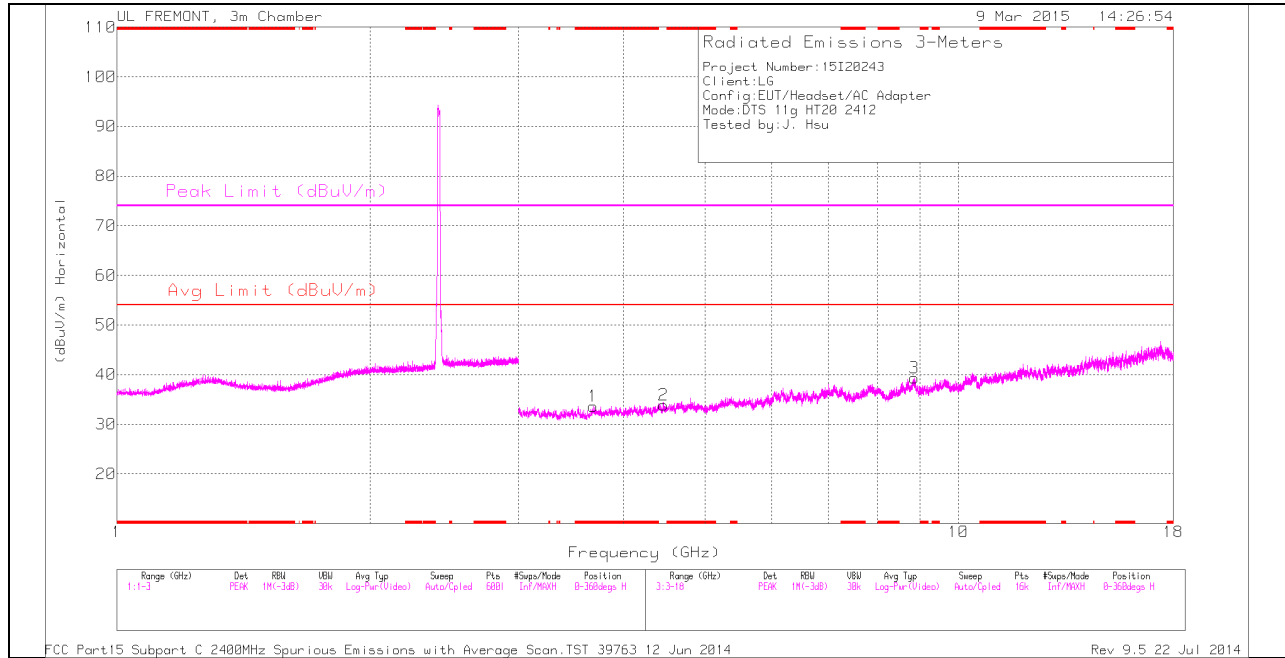
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

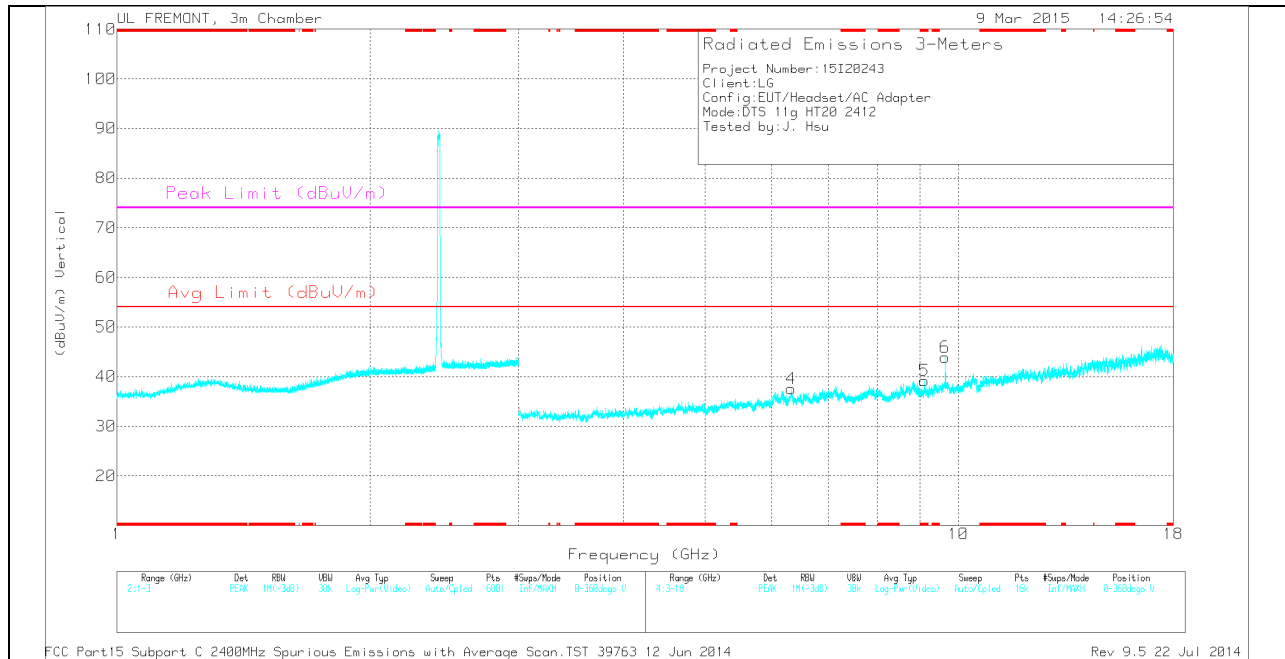
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.682	31.34	PK	33	-30.7	0	33.64	-	-	74	-40.36	0-360	200	H
5	* 9.102	29.46	PK	36.1	-26.3	0	39.26	-	-	74	-34.74	0-360	100	V
2	4.461	31.12	PK	33.7	-31	0	33.82	-	-	-	-	0-360	200	H
4	6.329	31.16	PK	35.4	-29	0	37.56	-	-	-	-	0-360	200	V
3	8.868	30.11	PK	35.9	-26.7	0	39.31	-	-	-	-	0-360	200	H
6	9.647	32.71	PK	36.8	-25.6	0	43.91	-	-	-	-	0-360	200	V

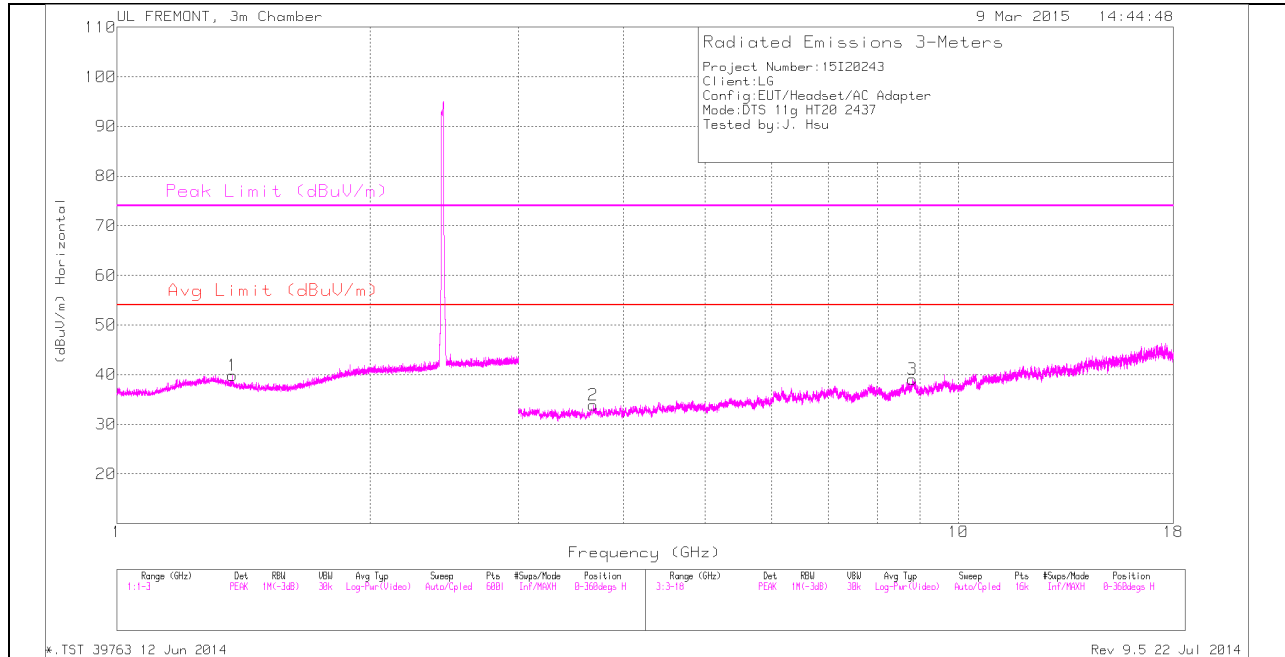
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.648	39.92	PK2	36.8	-25.6	0	51.12	-	-	-	-	151	147	V
9.648	32.57	MAV1	36.8	-25.6	.2	43.97	-	-	-	-	151	147	V

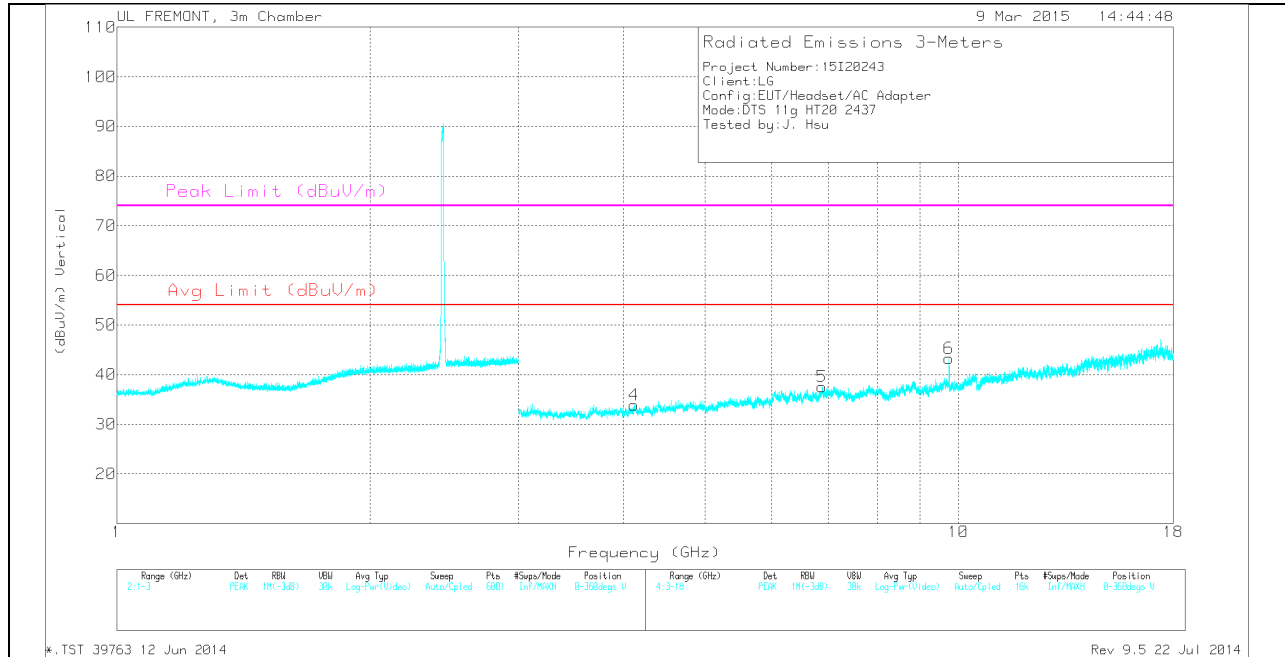
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK2 - KDB558074 Method: Maximum Peak
 MAV1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.372	34.67	PK	29	-23.8	0	39.87	-	-	74	-34.13	0-360	100	H
2	3.681	31.63	PK	33	-30.7	0	33.93	-	-	74	-40.07	0-360	100	H
4	4.114	31.45	PK	33.3	-30.9	0	33.85	-	-	74	-40.15	0-360	100	V
5	6.879	30.59	PK	35.6	-28.6	0	37.59	-	-	-	-	0-360	100	V
3	8.816	29.73	PK	35.9	-26.6	0	39.03	-	-	-	-	0-360	100	H
6	9.748	32.05	PK	36.9	-25.7	0	43.25	-	-	-	-	0-360	200	V

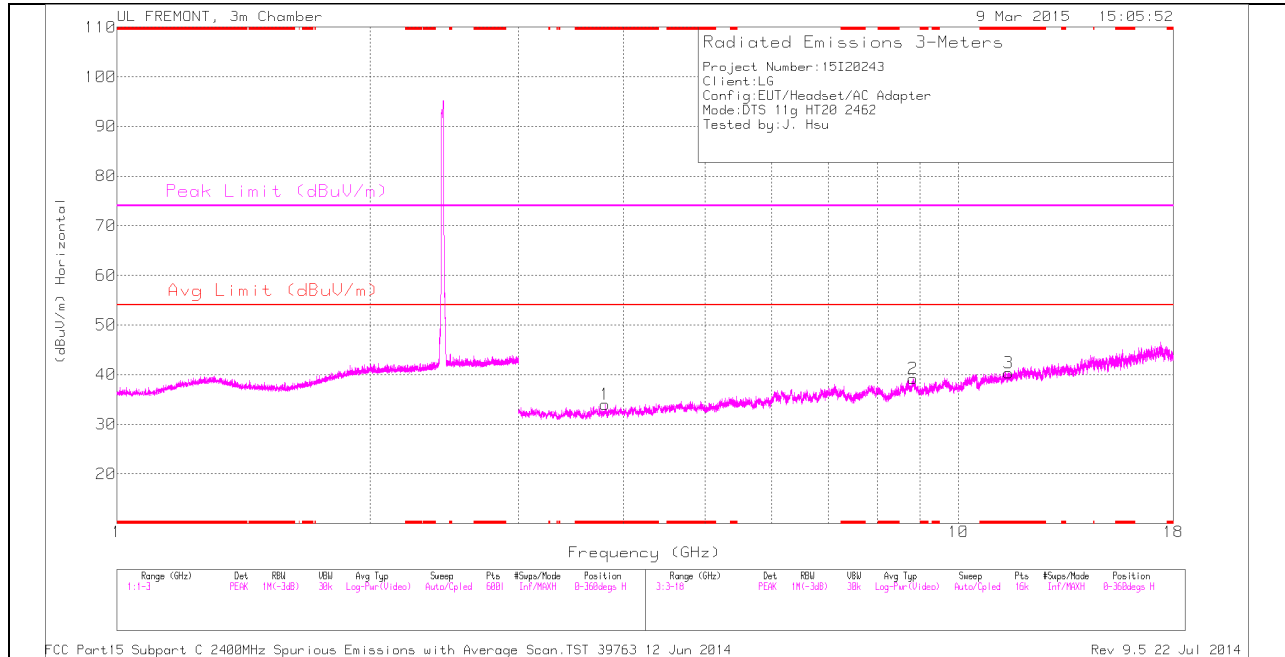
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.748	39.34	PK2	36.9	-25.7	0	50.54	-	-	-	-	159	212	V
9.748	31.79	MAv1	36.9	-25.7	.2	43.19	-	-	-	-	159	212	V

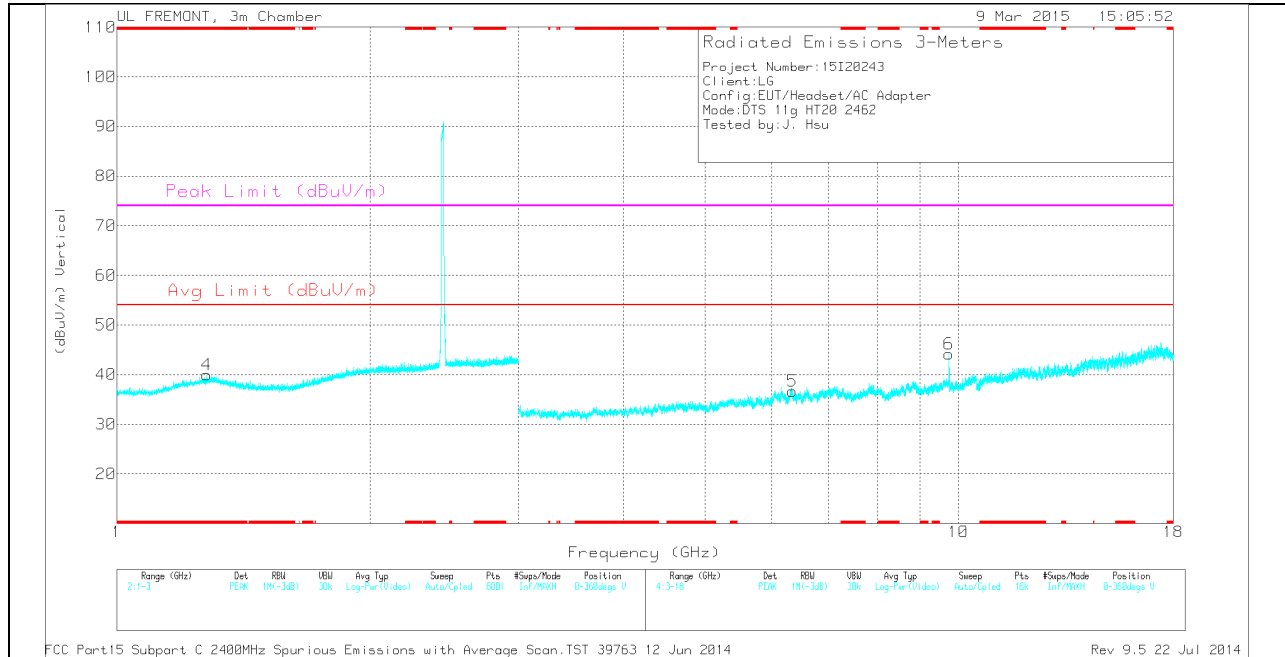
PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 1.279	34.09	PK	29.7	-23.8	0	39.99	-	-	74	-34.01	0-360	200	V
1	* 3.801	32.1	PK	33.1	-31.2	0	34	-	-	74	-40	0-360	100	H
3	* 11.462	27.59	PK	38.3	-25.5	0	40.39	-	-	74	-33.61	0-360	200	H
5	6.343	30.15	PK	35.4	-28.9	0	36.65	-	-	-	-	0-360	100	V
2	8.829	29.9	PK	35.9	-26.6	0	39.2	-	-	-	-	0-360	200	H
6	9.748	32.95	PK	36.9	-25.7	0	44.15	-	-	-	-	0-360	200	V

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK - Peak detector

Radiated Emissions

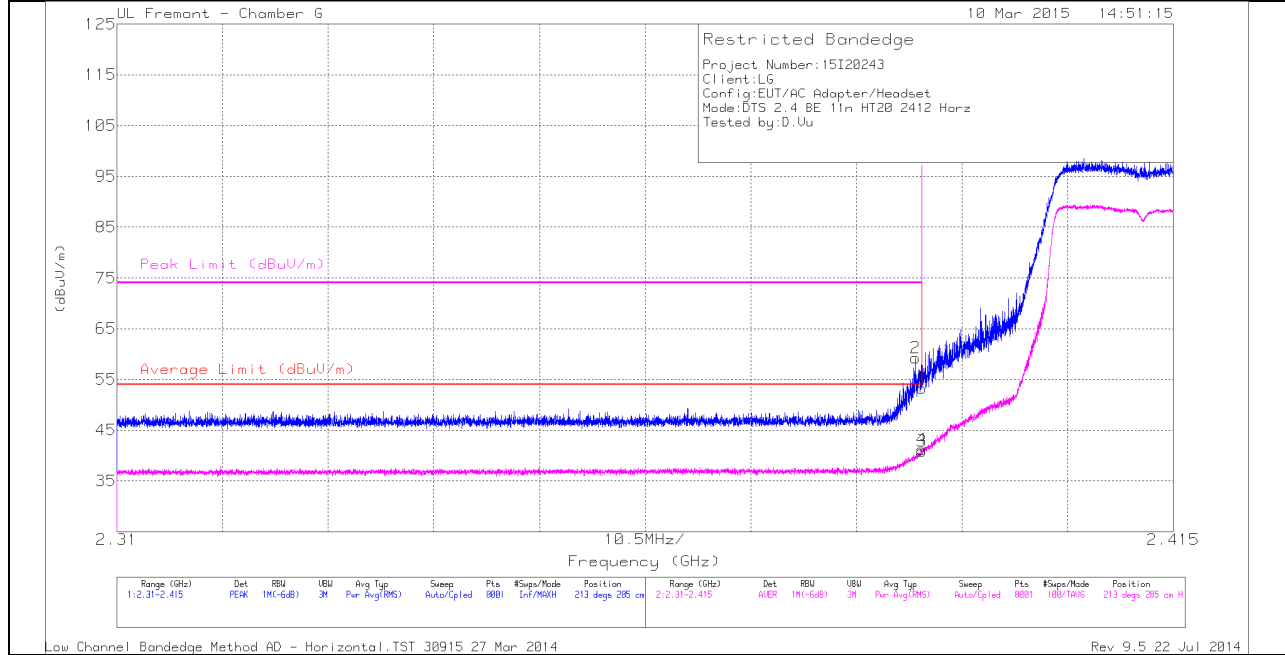
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.748	38.76	PK2	36.9	-25.7	0	49.96	-	-	-	-	152	200	V
9.748	30.92	MAV1	36.9	-25.7	.2	42.32	-	-	-	-	152	200	V

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK2 - KDB558074 Method: Maximum Peak
 MAV1 - KDB558074 Option 1 Maximum RMS Average

9.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

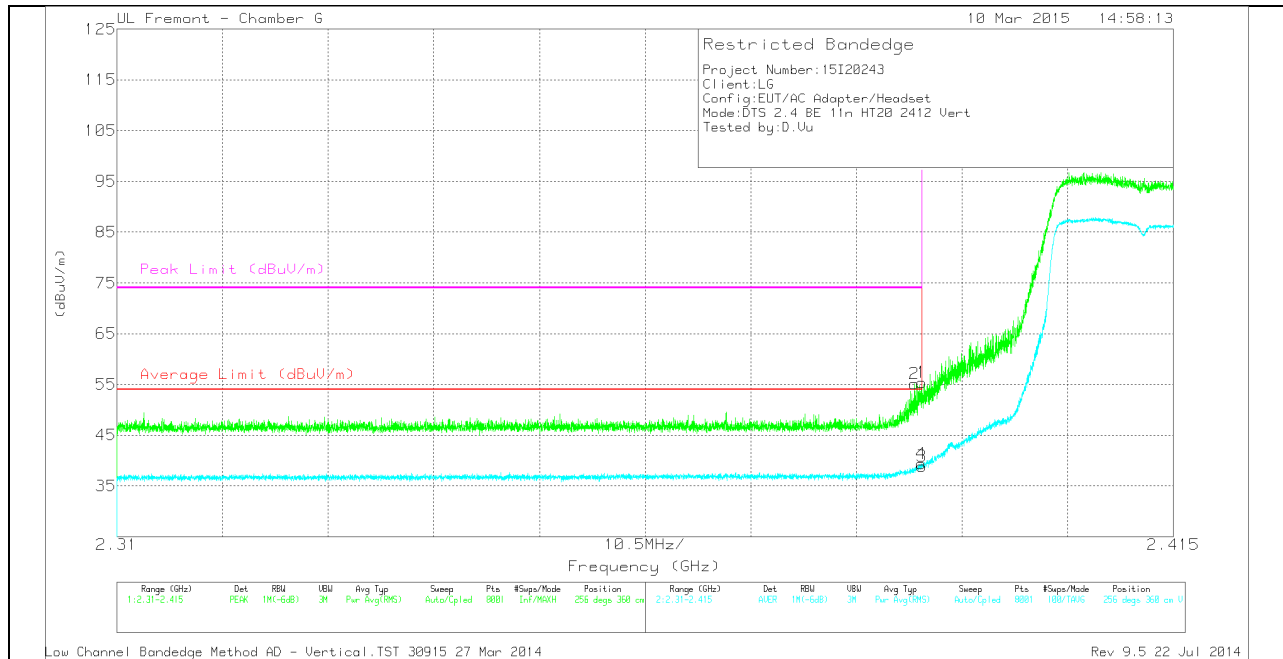
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Filter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	46.43	PK	31.8	-24.9	0	53.33	-	-	74	-20.67	213	285	H
2	* 2.389	52.31	PK	31.8	-24.9	0	59.21	-	-	74	-14.79	213	285	H
3	* 2.39	33.68	RMS	31.8	-24.9	.22	40.8	54	-13.2	-	-	213	285	H
4	* 2.39	34.15	RMS	31.8	-24.9	.22	41.27	54	-12.73	-	-	213	285	H

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Fitter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	48.46	PK	31.8	-24.9	0	55.36	-	-	74	-18.64	256	360	V
2	* 2.389	48.27	PK	31.8	-24.9	0	55.17	-	-	74	-18.83	256	360	V
3	* 2.39	31.79	RMS	31.8	-24.9	.22	38.91	54	-15.09	-	-	256	360	V
4	* 2.39	32.26	RMS	31.8	-24.9	.22	39.38	54	-14.62	-	-	256	360	V

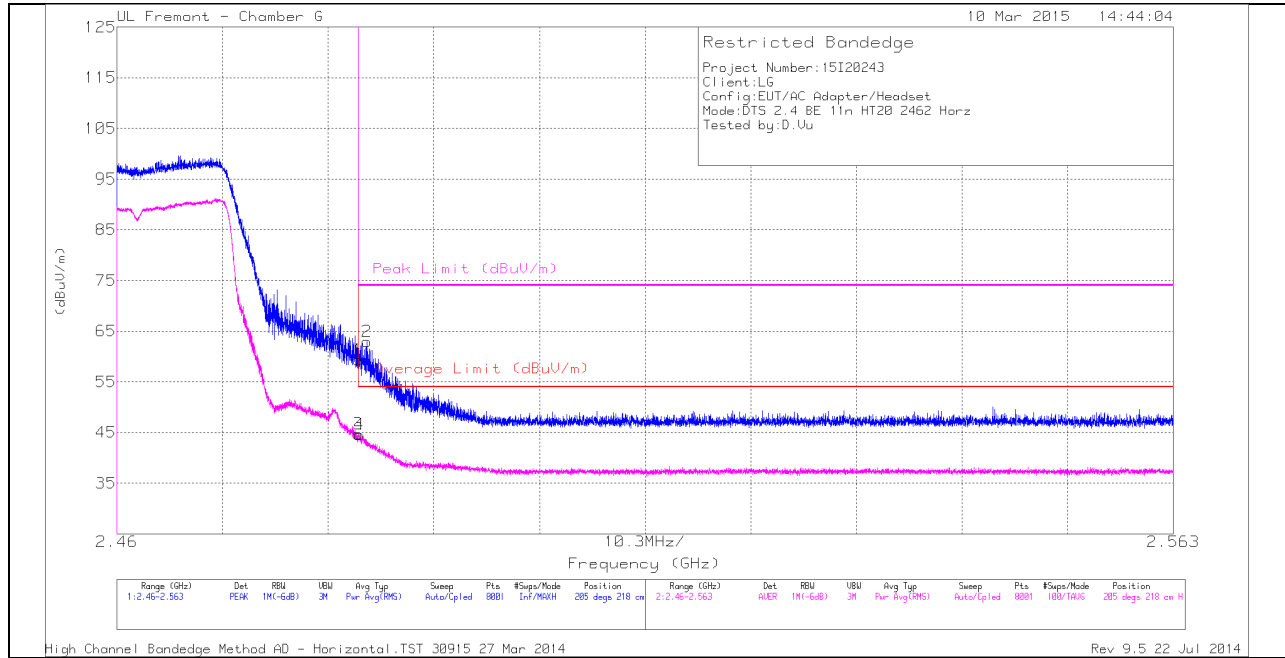
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

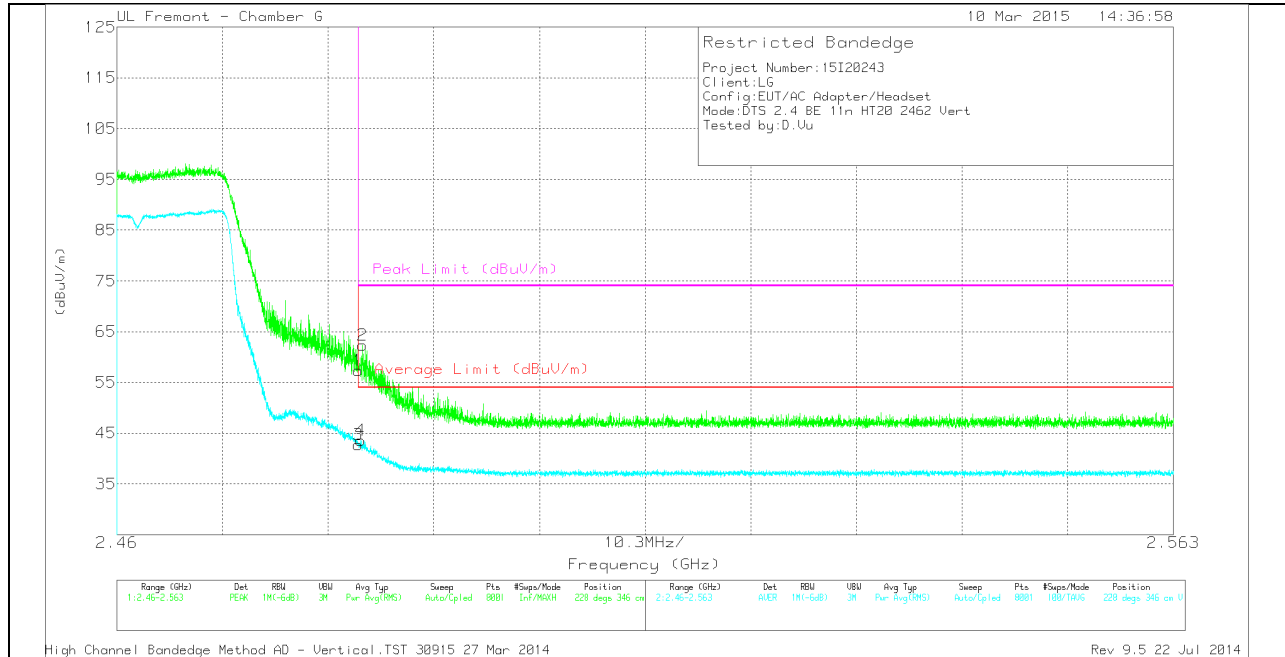
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	52.2	PK	32	-24.9	0	59.3	-	-	74	-14.7	205	218	H
2	* 2.484	55.87	PK	32	-24.9	0	62.97	-	-	74	-11.03	205	218	H
3	* 2.484	37.36	RMS	32	-24.9	.22	44.68	54	-9.32	-	-	205	218	H
4	* 2.484	37.29	RMS	32	-24.9	.22	44.61	54	-9.39	-	-	205	218	H

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	50.23	PK	32	-24.9	0	57.33	-	-	74	-16.67	228	346	V
2	* 2.484	55.27	PK	32	-24.9	0	62.37	-	-	74	-11.63	228	346	V
3	* 2.484	35.36	RMS	32	-24.9	.22	42.68	54	-11.32	-	-	228	346	V
4	* 2.484	36.3	RMS	32	-24.9	.22	43.62	54	-10.38	-	-	228	346	V

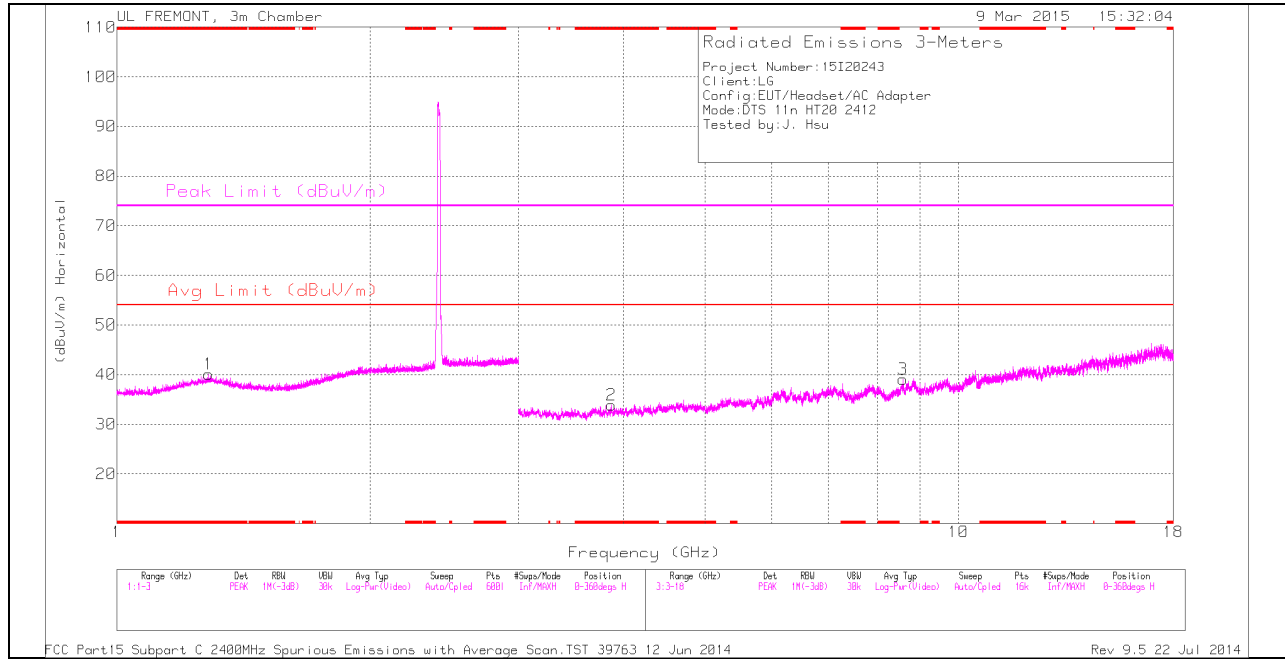
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

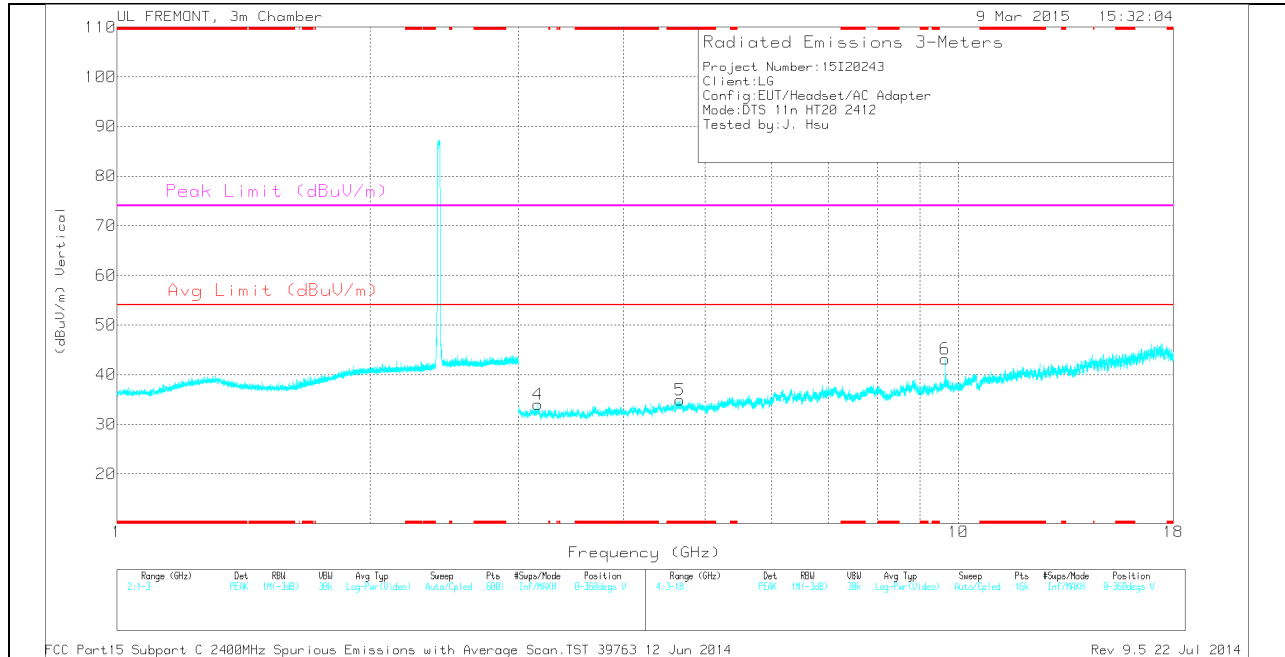
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.286	33.94	PK	29.8	-23.7	0	40.04	-	-	74	-33.96	0-360	100	H
2	* 3.869	32.12	PK	33.1	-31.4	0	33.82	-	-	74	-40.18	0-360	200	H
5	* 4.668	31.73	PK	34	-30.8	0	34.93	-	-	74	-39.07	0-360	200	V
4	3.163	32.31	PK	32.7	-31	0	34.01	-	-	-	-	0-360	100	V
3	8.592	30.41	PK	35.8	-27.1	0	39.11	-	-	-	-	0-360	100	H
6	9.647	31.91	PK	36.8	-25.6	0	43.11	-	-	-	-	0-360	200	V

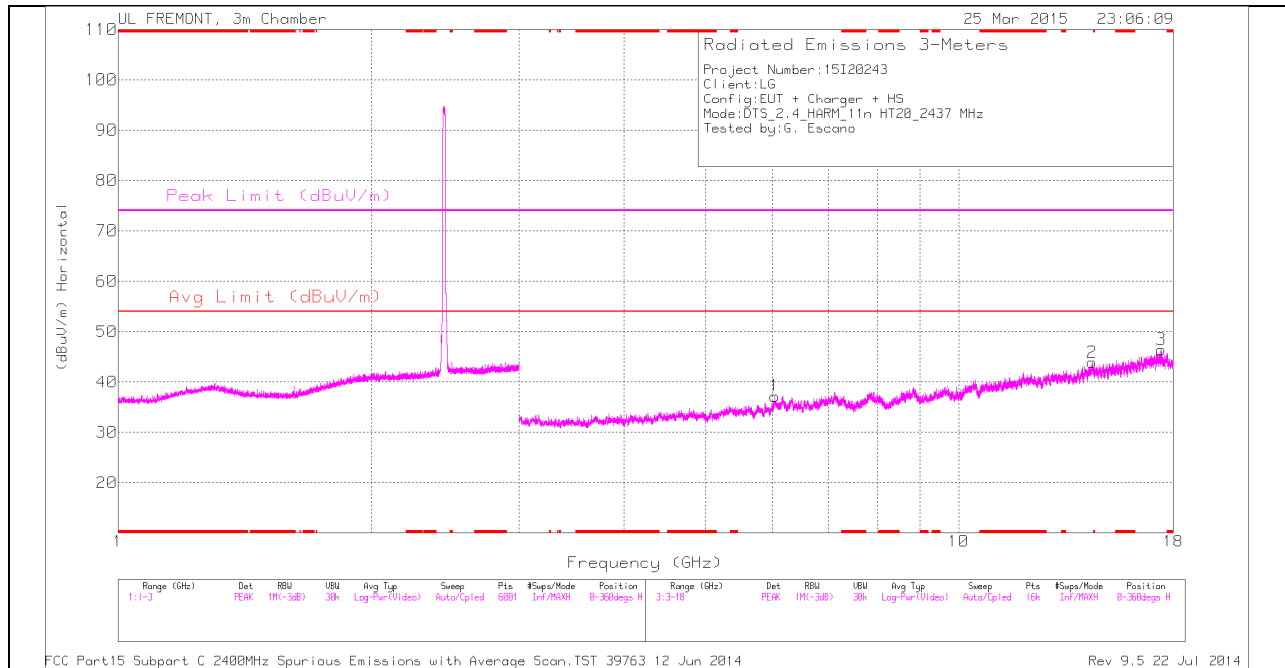
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.648	37.92	PK2	36.8	-25.6	0	49.12	-	-	-	-	351	120	V
9.648	29.1	MAV1	36.8	-25.6	.22	40.52	-	-	-	-	351	120	V

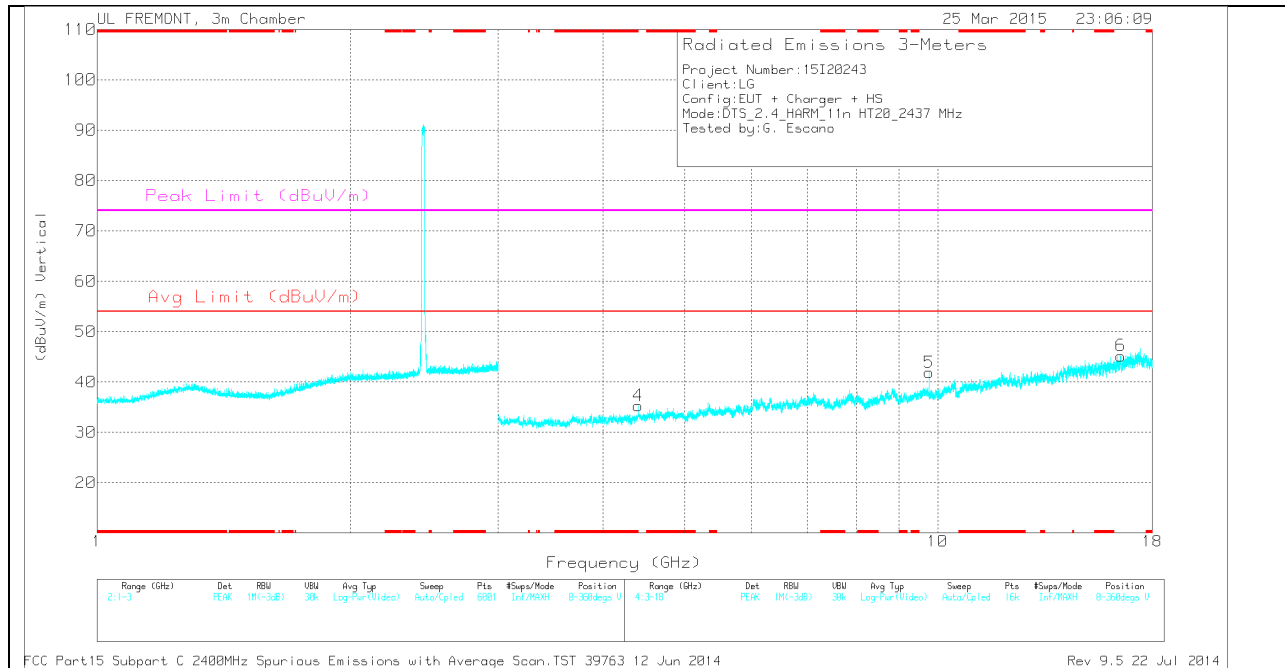
* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK2 - KDB558074 Method: Maximum Peak
 MAV1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

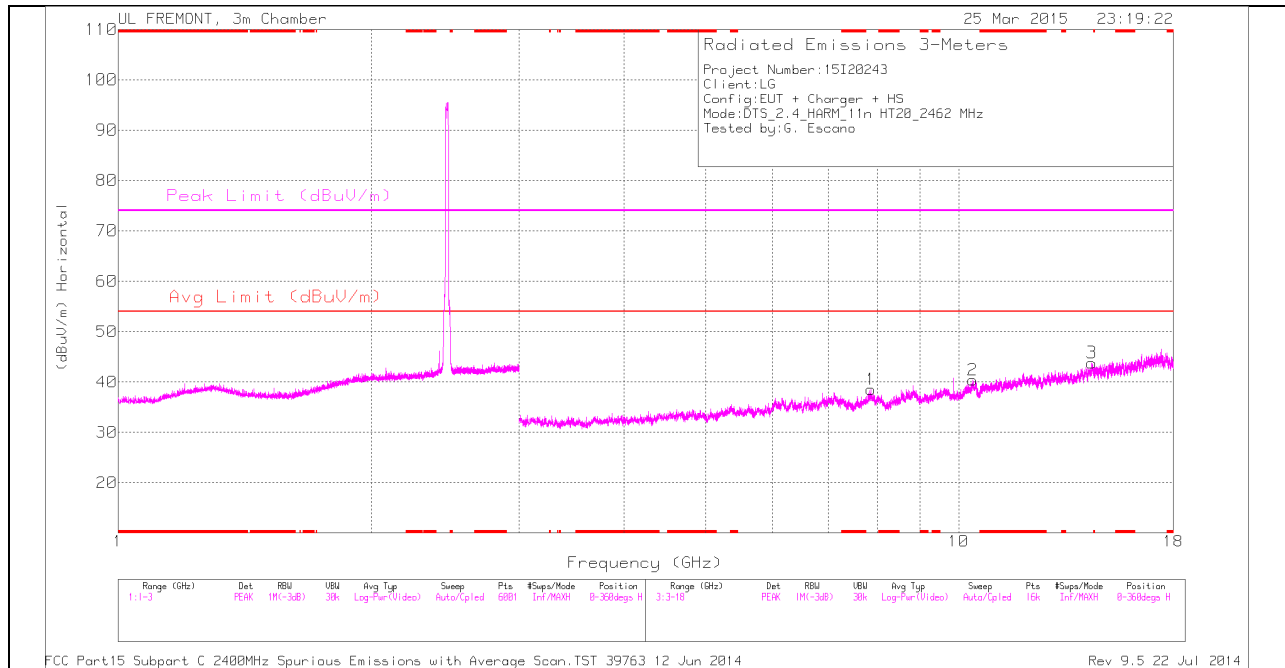
MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	4.401	31.7	PK	33.6	-30	0	35.3	-	-	-	-	0-360	100	V
1	6.041	31.21	PK	35.2	-29.2	0	37.21	-	-	-	-	0-360	100	H
5	9.767	31.01	PK	36.9	-26	0	41.91	-	-	-	-	0-360	100	V
2	14.405	30.48	PK	39.6	-26.2	0	43.88	-	-	-	-	0-360	200	H
6	16.504	28.11	PK	41	-23.9	0	45.21	-	-	-	-	0-360	100	V
3	17.417	27.13	PK	41.4	-22.1	0	46.43	-	-	-	-	0-360	200	H

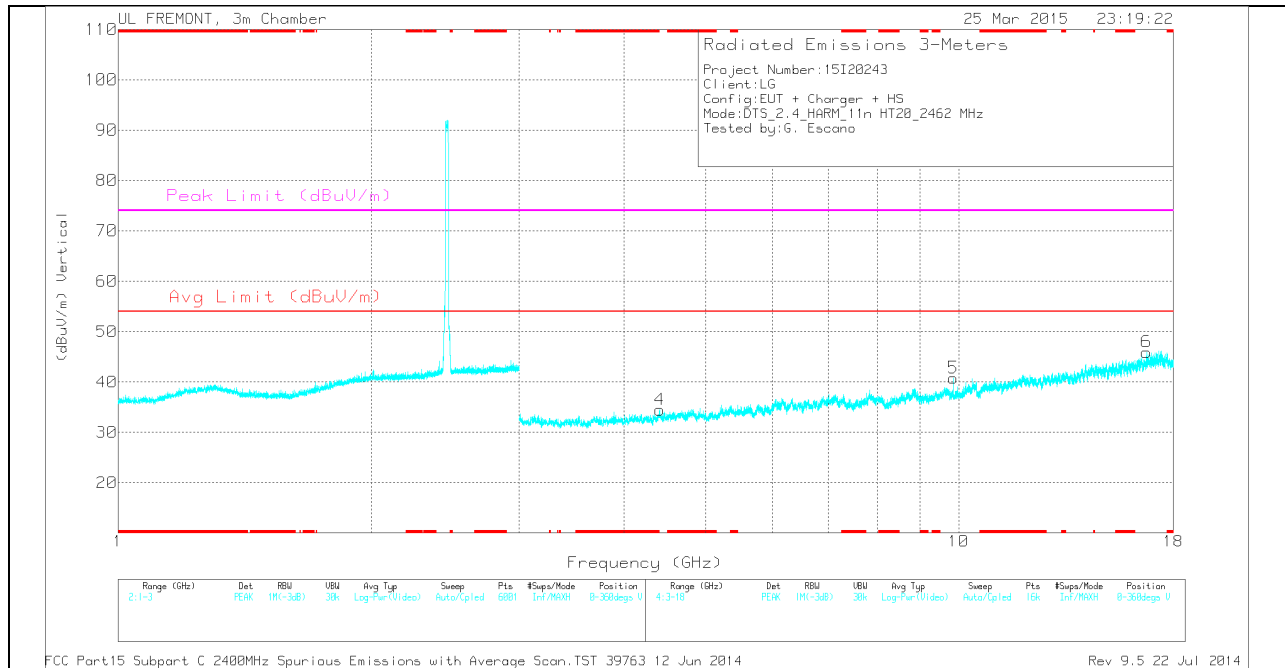
PK - Peak detector

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

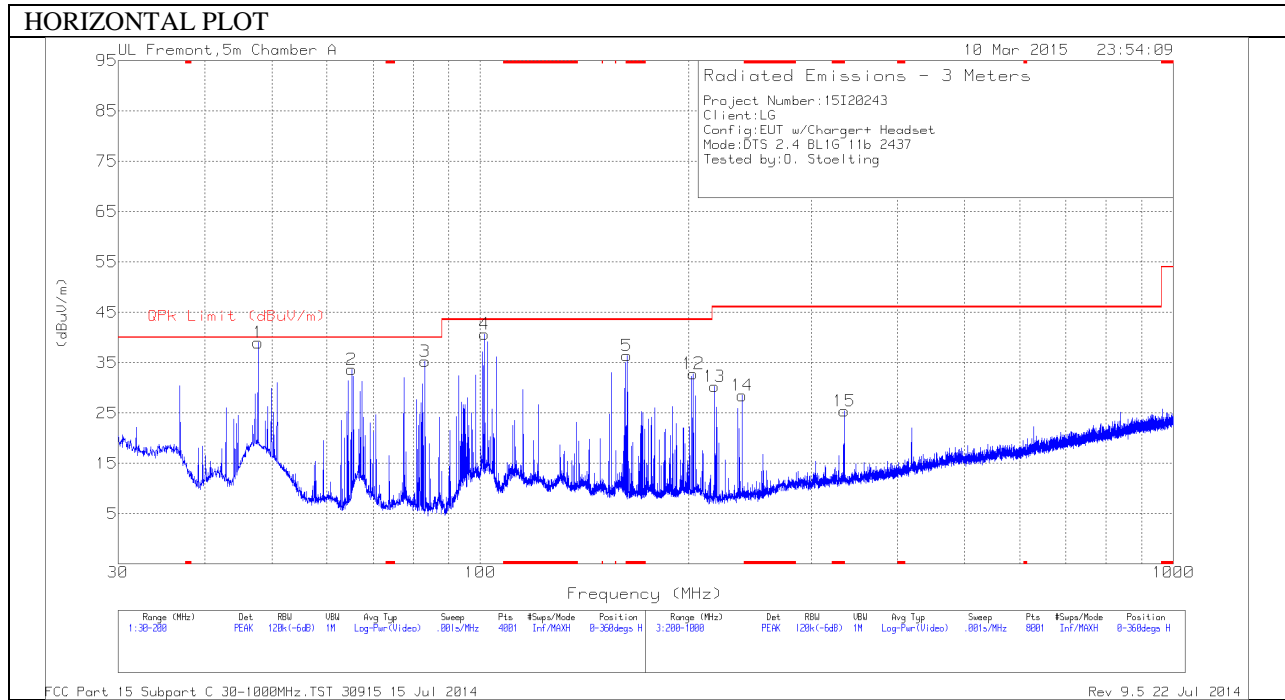
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	4.408	30.98	PK	33.7	-30.2	0	34.48	-	-	-	-	0-360	200	V
1	7.867	29.82	PK	35.8	-27.1	0	38.52	-	-	-	-	0-360	100	H
5	9.848	29.8	PK	36.9	-25.9	0	40.8	-	-	-	-	0-360	200	V
2	10.392	28.78	PK	37.2	-25.6	0	40.38	-	-	-	-	0-360	100	H
3	14.398	30.31	PK	39.6	-26.1	0	43.81	-	-	-	-	0-360	100	H
6	16.727	29.16	PK	41.2	-24.4	0	45.96	-	-	-	-	0-360	100	V

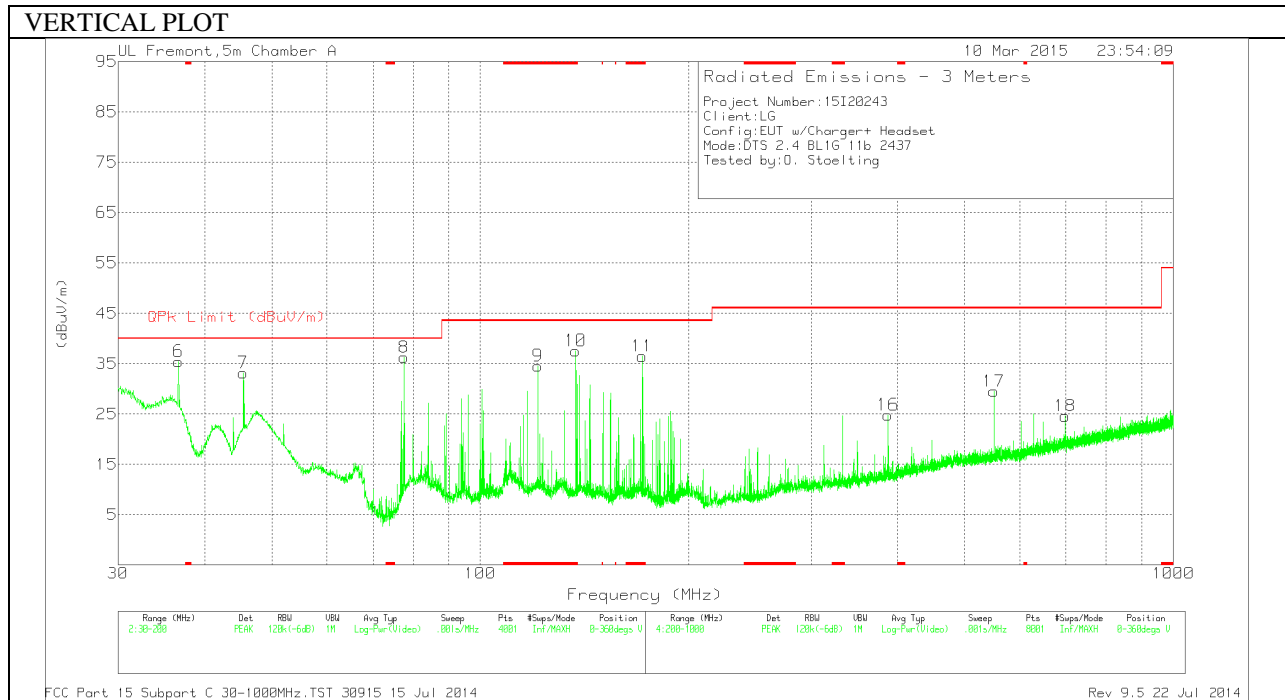
PK - Peak detector

9.3. TRANSMITTER BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)



SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)



Below 1G Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 162.685	54.69	PK	11.9	-30.2	36.39	43.52	-7.13	0-360	101	H
9	* 121.12	51.05	PK	13.9	-30.4	34.55	43.52	-8.97	0-360	101	V
10	* 137.27	54.05	PK	13.8	-30.3	37.55	43.52	-5.97	0-360	101	V
11	* 171.2275	54.87	PK	11.7	-30.1	36.47	43.52	-7.05	0-360	101	V
15	* 335.1	40.69	PK	13.9	-29.2	25.39	46.02	-20.63	0-360	100	H
6	36.6725	50.04	PK	16.6	-31.2	35.44	40	-4.56	0-360	101	V
7	45.47	53.97	PK	10.3	-31.1	33.17	40	-6.83	0-360	101	V
1	47.765	61.08	PK	9	-31.1	38.98	40	-1.02	0-360	300	H
2	65.19	56.53	PK	8	-30.9	33.63	40	-6.37	0-360	300	H
8	77.6425	59.58	PK	7.5	-30.8	36.28	40	-3.72	0-360	101	V
3	83.21	58.66	PK	7.3	-30.7	35.26	40	-4.74	0-360	200	H
4	101.3575	61.17	PK	10	-30.5	40.67	43.52	-2.85	0-360	300	H
12	202.9	50.79	PK	11.9	-29.9	32.79	43.52	-10.73	0-360	100	H
13	217.7	49.46	PK	10.6	-29.8	30.26	46.02	-15.76	0-360	100	H
14	238.6	46.78	PK	11.4	-29.7	28.48	46.02	-17.54	0-360	100	H
16	387.7	39.01	PK	14.9	-29.1	24.81	46.02	-21.21	0-360	101	V
17	550.9	39.9	PK	18.3	-28.7	29.5	46.02	-16.52	0-360	101	V
18	697.8	32.8	PK	20.1	-28.3	24.6	46.02	-21.42	0-360	101	V

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
 PK - Peak detector

10. APPENDIX A GEO-LOCATION VALIDATION DATA

The following data is provided for information and is outside the scope of UL's accreditation. The testing was performed by LG to show that the geo-location mechanism correctly enabled or disabled channels 12 and 13 based on the country code sent by the base station simulator

Wi-Fi Channel setting operation description

Network mode	LG Description	Test Result
No country code received	The device only operates with the default country code(12/13 channels disable)	Please refer to page 2,3
Invalid country code received	The device can't get invalid country code. If the network is connected, the country code is set in US(12/13 channels disable). Otherwise, if the network is not connected, the device operates with the default country code (12/13 channels disable)	
US country code	If the network is connected, the country code is set in US(12/13 channels disable). Otherwise, if the network is not connected, the device operates with the default country code (12/13 channels disable)	
US territories country code (Guam, Puerto Rico)	If the network is connected, the country code is set in US(12/13 channels disable). Otherwise, if the network is not connected, the device operates with the default country code (12/13 channels disable)	
Non-US country code	If the network is connected, the country code is set according to the network service. Otherwise, if the network is not connected, the device operates with the default country code (12/13 channels disable)	
Airplane mode	The device only operates with the default country code(12/13 channels disable)	
On loss of non-US country code (drop the link and verify device returns to default state)	The device only operates with the default country code(12/13 channels disable)	

* Default country code : the default setting of this device does not support WiFi 2.4GHz Channel 12&13.

Wi-Fi Channel setting operation description

◆ How to test?

1. AP Set to 12 or 13 channel
2. Settings -> Wi-Fi -> Wi-Fi On
3. A device could not search the AP

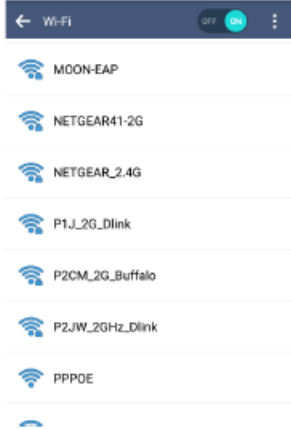
Ex)



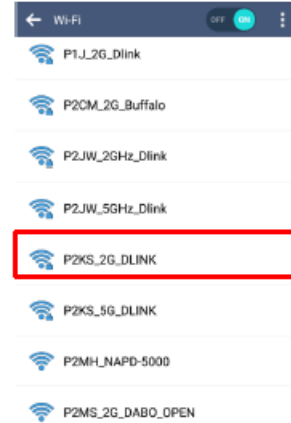
Ex)

SSID : "P2KS_2G_DLINK"
Channel : 13

- If a device disabled to 12/13 channel , could not search it.



- If a device enable to 12/13 channel , could search it.



Wi-Fi Channel setting operation description

◆ How to test?

- 1. Intall "Wifi Analyzer" from PlayStore
- 2. Settings -> Wi-Fi -> Wi-Fi On
- 3. Lunch "Wifi Analyzer"

- If a device disabled to 12/13 channel , could not search it 12/13 Channels APs.

- If a device enable to 12/13 channel , could search 12/13 Channels APs.

